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Demographic Change and the Well-Being of Children and the Elderly

Demographic Change and the Well-Being of Children and the Elderly

Proceedings of a Workshop

Committee on Population
Commission on Behavioral and Social Sciences and Education
National Research Council

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PREFACE

In September 1985, with support from the Alfred P. Sloan Foundation, the Committee on Population organized a workshop to discuss demographic change and the well-being of children and the elderly. The Workshop on Demographic Change and the Well-being of Children and the Elderly was held September 5-7, 1985, at the National Academy of Sciences Study Center in Woods Hole, Massachusetts. This report summarizes the discussion at that meeting and presents three important papers that were presented during the workshop.

The workshop considered four critically important questions. First, participants examined trends in income, health, social support, and other aspects of the well-being of children and the elderly. Second, explanations for the trends described in the first session were considered. Particular emphasis was given to the role of demographic change in influencing the well-being of different groups in the population, and to the usefulness of an age-based approach to understanding social problems. A third focus was a comparison of the status of children and the elderly in the United States with the status of these groups in other industrialized countries. Such comparisons provide benchmarks for judging the adequacy of American society's support for children and the elderly and are also valuable for understanding the relationship between public policy and social change. A fourth issue taken up by the participants concerned the implications of anticipated policy, behavioral, and demographic changes for children and the elderly. Finally, participants discussed the implications of the workshop presentations for future research.

The success of the workshop was due to the efforts of the organizers, who carefully planned each session, recruited the participants, coordinated the presentations, and chaired the discussions. The Committee on Population is very grateful to Robert Binstock, Hugh Heclo, Sheila B. Kamerman, William A. Morrill, John L. Palmer, Samuel H. Preston, and Arland Thornton for their time and effort. Special thanks are also due to Kenneth Chomitz, National Research Council Fellow, who coordinated the conference activities and drafted the report. Thanks are also due to Robert J. Lapham and Peter J. Donaldson, study directors at the beginning and end of this project; Diane Lindley and Cheryl Hailey, who assisted with administrative and secretarial work; and Christine McShane, who edited this report. Our appreciation is also

due to David A. Goslin, executive director of the Commission on Behavioral and Social Sciences and Education, who encouraged the committee to undertake this project and chaired the workshop.

Albert I. Hermalin
Chair, Committee on Population

PART I

PROCEEDINGS

INTRODUCTION

Recent decades have witnessed major changes in American families as well as a significant shift in the age distribution of the population. Over the coming decades, the population of the United States will continue to age, and further changes in family life are also likely. These changes have important consequences for the well-being of children and the elderly. Some observers have suggested that the well-being of the elderly has improved significantly over the past two decades, while that of children has remained stable or become worse.

The workshop was inspired, in part, by Samuel Preston's 1984 article, "Children and the Elderly: Divergent Paths for America's Dependents." Using economic and other indices, this article presented evidence of a long-term decline in the well-being of children coincident with a gain in the well-being of the elderly. Preston hypothesized that the relative deterioration in children's status was linked to two far-reaching demographic changes in American society. First, major changes in family structure have resulted in an increasing proportion of children who live in single-parent households. Second, the population is aging, so that parents of young children constitute a smaller proportion of voters, while elderly people and their adult children constitute a larger proportion. This change might be expected to shift political support toward public expenditures favoring the elderly and away from those favoring children.

These ongoing demographic changes--the decline of the two-parent family and the aging of the population--have been viewed as a threat to the future well-being of both children and the elderly. A particular source of concern is the prospective burden--financial, medical, and social--of supporting the rapidly growing proportion of the population who are elderly (age 65+), especially the exploding number of "very old" (age 85+).

The Committee on Population organized the workshop as an informal forum to examine these concerns and suggest useful perspectives for policy and research. What have been the trends in well-being among the two dependent groups? What has been the role of demographic changes in those trends, and what are the sources of those changes? Do age-based constituencies shape public policy? Is intergenerational equity a valid concern?

To address this ambitious range of questions, the working group invited participation by researchers from a broad spectrum of disciplines who are actively engaged in work on these questions. As a stimulus to discussion, participants were asked to circulate relevant recent articles. In addition, three background papers that were were written specifically for the workshop proved particularly helpful are included in this volume.

These proceedings are organized around the five workshop sessions:

- Trends in well-being among children and the elderly
- International comparisons of well-being among children and the elderly
- Causes and consequences of change in family structure
- The political economy of an aging society
- Conclusions

It must be stressed that the meeting was an exploratory workshop, with the goal of stimulating interdisciplinary discussion and sorting through a set of difficult issues. These proceedings should be interpreted not as definite pronouncements, but as the record of a lively and spontaneous discussion.

TRENDS IN WELL-BEING AMONG CHILDREN AND THE ELDERLY

This session addressed three aspects of the well-being of children and the elderly in the United States: economic status, health, and psychosocial well-being.

ECONOMIC STATUS

Palmer introduced this topic by focusing on three questions related to the economic status of children and the elderly: (1) What have been the trends of the last two decades? (2) Where are we going? (3) What are the important issues in this area?

On the first question, Palmer summarized the findings of two of the background papers for the workshop--"The Changing Economic Status of the Young and Old" by Duncan, Hill, and Rodgers, and "The Economic Status of the Young and the Old in Six Countries" by Smeeding, Torrey, and Rein.

The most critical measure used in the first of these papers is cash income relative to needs over a 15-year period, with adjustments for such factors as family size; the groups examined were children, the elderly, and others. Both cross-sectional and a longitudinal analyses were presented. The cross-sectional analysis suggests that both children and the elderly started out (in 1968-1972) and ended up worse off than the "other" group. However, the relative position of children deteriorates, while that of the elderly stays constant or improves; thus the position of the elderly relative to that of children improves markedly. This trend has probably continued over the past few years. Public transfers play a minor and declining role in the economic position of children and a major and increasing role among the elderly.

The longitudinal analysis suggests that the well-being of an aged cohort declines over time, while that of a cohort of children improves. Successive cohorts of the elderly entering old age with higher income status account for a large part of the increase in the cross-sectional average over time. The data also indicate the role of race, sex, and living arrangements in economic status: there are large gaps between blacks and whites and a much smaller but still substantial gap between male and female elderly.

The Smeeding et al. paper is based on a 1-year (1979) rather than a 15-year period and measures full income, including in-kind transfers,

employment-related benefits, housing, and taxes, rather than just census money income. While money income measures show the ratio of average elderly to nonelderly household income to be about 0.5, the more sophisticated full-income measures show the two groups to have roughly equal incomes. Elderly couples are appreciably better off than elderly living alone. Full-income adjustments also reduce measured inequality within both groups. However, the degree of inequality is still much greater among the elderly. There is a heavy concentration of elderly between the poverty line and the median income level as well as a sizable group of very affluent elderly.

Palmer speculated that the application of Smeeding's full-income adjustments to the Duncan et al. cross-sectional results would shift the time path of the elderly income/needs ratio upward and perhaps make the slope somewhat gentler, but would not affect the overall trend. Similarly, adjusting their longitudinal analysis for health benefits and housing might make the elderly cohort's decline of income with age somewhat less steep.

Palmer cautioned that the basic trend described in these and other data--the improvement of the elderly income/needs ratio relative to that of children--should not be mechanically projected into the future. In fact, making the assumption of no major policy changes or extraordinary economic conditions, Palmer predicted that the relative status of the elderly vis-a-vis children should stabilize. This is because many of the gains made by the elderly over the 1968-1982 period were peculiar to that period and would not be expected to continue. Five factors are particularly important in this respect:

(1) Poor macroeconomic performance--the period was largely one of economic stagnation, and the elderly do better than other groups during bad economic times because they are not as dependent on earned income.

(2) Rapid expansion in inflation-adjusted per capita government benefit levels for the elderly--due to new legislative programs and the maturation of the social security system.

(3) Housing inflation and high interest rates--these have enriched the elderly vis-a-vis other groups.

(4) A decline in inflation-adjusted per capita government benefits for children--which has occurred since the early 1970s.

(5) The depressed market wages of the baby boom cohort--which have adversely affected their children's income status.

For the remainder of this century, Palmer speculated that the growth rate of elderly income would be about the same as that of nonelderly income, but with private sources playing an increasingly important role in elderly income. Early in the next century, the elderly will experience slower income growth as the baby boom cohort's depressed lifetime market wages and upward adjustment in the age of eligibility for full social

security benefits result in slower growth in social security benefits. Since private sources of income are far more important to the affluent elderly and public sources dominate the income of the low-income elderly, there will be growing inequality between these groups. There will also be greater inequality between the elderly and children, especially for minorities.

More attention could be paid, Palmer suggested, to the question of whether the well-being of such disparate groups as children and the elderly can be meaningfully and usefully compared. In particular, more work is needed on equivalence scales (adjustments for household size and composition), since these measures are sensitive to underlying methodological assumptions. Careful thinking is also needed on how (or whether) to include public education as an element in the economic well-being of children. The results discussed in this report have not attempted to factor in the value of public education and may therefore understate the well-being of children. Finally, there is much more to be learned about the heterogeneity within both groups. It would be particularly interesting to have additional longitudinal information about the economic response of different kinds of people to aging or other circumstances. For instance, Smeeding et al. have stressed the economic vulnerability of the "tweeners"--elderly people who are neither well-off nor sufficiently poor to qualify for Medicaid or Supplemental Security Income. Finally, regarding policy implications, Palmer suggested that there is a need for more discriminating policies that take into account varying income needs, addressing in particular the problem of black children.

Several themes that were evident in the ensuing broad-ranging discussion are outlined below.

Trends in Economic Well-Being and Their Causes

Several aspects of the results reported in the paper by Duncan et al. were disputed on technical grounds. Danziger reported that decennial census data confirm the finding that successive cohorts of the elderly are better off but contradict the finding that the members of a particular cohort suffer a decline in income as they age. Instead, he suggested, what we observe is a permanent decline in married women's income upon widowhood. Hill speculated that the more disaggregated age groups used in the Duncan et al. study provide a more accurate picture. (At this writing, both Danziger and Duncan and Hill are working independently to reconcile the findings.) Preston questioned the finding that successive cohorts are better off, pointing to the increased role of public transfers in the income of younger cohorts. It was noted, however, that much of the increase in these transfers can be interpreted in the social-security-as-pension model as reflecting higher lifetime earnings.

Preston also questioned the Duncan et al. assertion that family structure changes account for a small part of the increased poverty rate among children. He noted that on a simple decompositional basis, the increased prevalence of one-parent households accounts for 44 percent of the rise in the prevalence of poverty among children between

1970 and 1982. Bane believes that family structure change cannot explain post-1980 increases in child poverty and may not explain much of the massive increases over the decade of the 1970s. Kamerman suggested that the increase in poverty might have been much worse had it not been ameliorated by a downward trend in fertility and thus family size.

Intergenerational Equity Versus Intragenerational Equity

In Smeeding's view, the principal relevant intergenerational equity issue involves the long-term prospects of the baby boom generation, which is experiencing depressed lifetime wages, increased current taxes, and the prospect of relatively low retirement and medical benefits from the next generation.

However, Smeeding et al. and several other participants stressed that the intracohort contrast between rich and poor is striking enough to invalidate simple comparisons between "the old" and "the young" or between adjacent birth cohorts. Zoellner characterized the notion of intergenerational inequity as totally foreign to European thinking, which instead frames discussion in terms of equity between social groups that cut across all ages.

There appeared to be consensus among the group that public policy ought to focus on the elimination of poverty, which would entail reducing the gap between rich and poor regardless of age. It was pointed out that, in some ways, current policy exacerbates income inequality; for instance, Smeeding et al. found that the top 10 percent of the elderly receive more in transfers than they pay in taxes.

More discriminating policies, in Danziger's view, would include as goals:

- Expanded outreach for Supplemental Security Income and food stamps among the elderly to attack the poverty problem of the aged (many elderly qualify for these programs but do not apply for them).

- A shift away from age-based benefits toward income-tested benefits by introducing income testing of Medicare, full taxation of social security, and elimination of double tax exemptions for the elderly.

- Expansion of programs that directly help poor children, including Head Start and Medicaid.

The Meaning and Measurement of Poverty

Danziger questioned Palmer's view of the importance of research on equivalence scales. Danziger suggested that the principal issue was whether one should adjust household income for household size. That decision having been made, he felt that the precise choice of equivalence scale was relatively unimportant. This was disputed by Rein, who felt that the validity of equivalence scales was a major intellectual

issue, citing the sensitivity of Smeeding's full-income estimates to the method used to adjust income for household size.

Many participants, however, questioned whether household income-based poverty measures, however sophisticated, can accurately assess the extent of poverty, understood as those who are truly in need. The following objections were raised to measures based on an income-defined "poverty line":

- Such measures make implicit assumptions about how adults spend their income on their children. In fact, we know almost nothing about intrafamily transfers or patterns of consumption among children.

- Much of our concern for children revolves around the importance of childhood development in determining an individual's lifetime earnings potential. We do not have any measures for the "investment" component of children's current income or consumption levels (let alone for nonfinancial aspects of human experience). Measures that include this component might give a very different picture of trends in children's well-being. For instance, Zill pointed out that between 1970 and 1982, the percentage of black births to high school graduates rose from 49 to 65 percent; this increase in the level of mother's education would be expected to have some positive long-term impact on children.

- Perhaps more fundamentally, many of the noneconomists in the group proposed that income measures were simply insufficient to depict poverty and that richer descriptions of behavior, environment, and consumption were necessary. Binstock, for instance, cited an ongoing study by Faye Cooke of Northwestern University that attempts to assess the conditions of poverty via qualitative questions about living conditions.

HEALTH

Kovar provided a review of health trends beginning with a discussion of mortality and life expectancy. In general, life expectancy has been increasing throughout this century and is expected to continue to increase, although at an attenuated rate. During the early part of the century, the decline in death rates and consequent increase in life expectancy were due almost entirely to the decline in infant and early childhood mortality. The chances of reaching age 65 have increased, but a 65-year-old's chances of surviving to older ages remained relatively constant. Since the mid-1960s, there has been a marked decrease in death rates among the elderly, especially in deaths due to heart disease. During the period 1970-1980, women gained 3.1 and men 3.0 years; the rate of heart disease has been dropping for both sexes.

However, the decline in these rates for the very old (age 85+) may have ended, while for the younger elderly they continue to decline. The male-female differential in life expectancy is decreasing, in part because of the rapid rise in lung cancer deaths among women and the decrease among younger men, although the latest data indicate that these rates among women have begun to decline. Death rates for infants

continue to decline, but at a decreasing rate, and are rising in some parts of the country, as are early childhood death rates. The differential between blacks and whites is not decreasing. Among young children, death rates are already very low and stable. They are declining for young adults, with the great majority of death traceable to external causes. Of the latter, accident and homicide deaths are declining, while suicide is increasing, especially among white males; this increase parallels, with a lag, the rise in the number of children whose parents have divorced.

Health status is more difficult to measure than mortality. Current data on health status have two noteworthy limitations:

(1) National surveys do not include people who live in institutions. We do not even know how many people live in institutions, let alone what their characteristics are. Changes in institutionalization policy could distort our measure of the health of the noninstitutionalized population.

(2) The data depend on people reporting on their own health status, and therefore probably do not measure their clinical state of health. This is a particularly significant problem for children, who do not report their own health status, so that an adult bias is introduced. An exception to self-reported data is the National Health and Nutrition Examination Survey; however, it does not include the elderly, so there are no comparable measures for children and elderly adults.

With these limitations in mind, there are nevertheless some indications that the health status of certain age-specific groups may be declining. The proportion of children who are limited in activity increased during the 1970s, though these data are complicated by the fact that more children were using health care services, and in the 1970s many children were no longer institutionalized. Kovar noted further that two measures of disability among the elderly--activities of daily living and instrumental activities of daily living--have no counterpart for children. Among the elderly, limited evidence from Canadian nursing home surveys suggests an increase in the proportion of elderly who are "dependent."

Understanding differential trends in mortality and disability is crucial. For the United States, a combination of stable disability rates and declining mortality would imply that by 2040 there will be approximately 12 million women over age 65 who will need either help with daily activities or a nursing home. However, if disability rates decline twice as fast as mortality rates, there will be 8 million disabled elderly women.

Kovar ended her presentation by discussing the implications of medical care expenditures for public policy. She noted that medical care expenditures have been rising (measured both per capita or as a share of gross national product) and are projected to continue to rise. Almost one-third of health care expenditures is devoted to the 11 percent of the population over age 65. This disproportionate expenditure attracts particular attention because about two-thirds of money spent

on health care of the aged is public money, compared with one-third for those under age 65.

Kovar emphasized her view that misuse of this sort of aggregate statistics could lead to misallocation of funds, to the inadvertent creation of issues, and to the currently perceived conflict between children and the elderly. For instance, it is often noted that while the majority of Medicaid recipients are Aid to Families With Dependent Children (AFDC) children, most Medicaid funds are spent on the elderly. Kovar suggested that this may be entirely appropriate given the differential levels of health and medical need between the two groups. No one, she said, finds it inappropriate that the relatively small number of disabled people on Medicaid rolls receive relatively large amounts of medical benefits.

Similarly, although average aggregate expenditures for the elderly are high, and the elderly are more likely than other age group to be ill, need acute care, and die, much of the money spent is on a relatively small proportion of people: in 1980, 6 percent of the elderly received 61 percent of the money spent. These are sick people, 99 percent of whom were hospitalized during the year. Kovar noted that the vast majority of the elderly are neither institutionalized nor dying: only 5 percent of the elderly are institutionalized or die in a given year; another 20 percent spend some time in the hospital during the year; while the remaining 75 percent spend no more on health care than the rest of the population.

In conclusion, Kovar recommended that we move away from the use of aggregate statistics on the needs of the elderly as a group in making policy decisions about health. Public health resources, she said, should not be allocated on purely demographic bases such as age, nor should they be means-tested. Instead, she recommended that they be allocated on the basis of the need for care and the efficacy of care. Furthermore, she suggested, concern should be broadened from medical care to health care.

Toward these ends, Kovar suggested the creation of specific measures of need for care and expected outcomes of care. The relation between need and outcomes should be studied with a few, small-scale, longitudinal studies with well-defined objectives. Results should be used as a basis for allocating health care.

Kovar's presentation elicited questions and discussion on the following points:

- Gains in life expectancy--According to Kovar, during the period 1960-1975, the greatest gains in life expectancy were realized by the elderly. In the late 1970s, there was a push for a reduction in infant and child mortality and for improved maternal and child health. This resulted in a rapid decline in infant and child mortality. In the last few years, this decline has slowed greatly or ceased, and in some places hit hardest by the recession, the rate is going up.

- Unmet need for health care--What proportion of people are financially incapable of obtaining the health care they need? The standard measures of unmet need for health care are inaccurate, Kovar cautioned.

These include (1) surveys that show that only a very small proportion of the population report having had an illness for which they would like to have seen a doctor but could not or did not; and (2) surveys that show only a small fraction of the population not covered by insurance. In contrast, studies by Kovar and others of actual levels of medical care (prenatal care, for instance) show that poor people not covered by Medicaid are not receiving adequate care, even if they have private insurance. The problem is that many of these people do not realize how inadequate their insurance protection is; often the extent of coverage is actually very low. In contrast, many young adults who are in good health and have access to private medical care choose not to carry any insurance.

- Costs and extent of disability among the young--Concerns were expressed about the financial implications of lifetime support for severely disabled children whose deaths are now averted with improved medical technology. Is the number of such individuals growing exponentially? Kovar replied that the probability of both survival and of disability-free survival has increased for all low birthweights. Thus, while very low birthweight babies (who previously would have died) are now surviving but doing so with a significant chance of permanent disability, moderately low birthweight babies (who previously would have been permanently disabled) are now surviving disability-free. However, most disabled children are of normal birthweight. For these children, observed Zill and Morrill, our data are very poor. To illustrate the relative magnitude of various disability costs, Kovar estimated that nursing home care for an elderly person averaged $8,000 annually, care for an institutionalized, mentally retarded person averaged $80,000 annually, and the average neonatal cost for a low birthweight baby was a one-time $60,000.

PSYCHOSOCIAL WELL-BEING

This issue was examined first for the elderly by George, then for children by Zill.

George addressed issues of social support as well as psychosocial well-being. She maintained that because of the importance of social support and intergenerational interdependence, it is essential that families be the unit of analysis rather than individuals or households. She estimated that about 80 percent of the value of transfers to the elderly (including services) is currently provided by families. The willingness of family members to bear the great economic and psychic costs of caring for an impaired elderly relative is a prime determinant of institutionalization.

Thus far, George reported, these family support mechanisms have been extremely successful in keeping elderly people out of institutions. Looking at future trends, George suggested, such intrafamily transfers will become increasingly problematic. Elderly parents with fewer children tend to receive less support than parents with more children (despite, it was pointed out in discussion, a greater per-

child contribution in the smaller families). Moreover, the growing instability of family structure (discussed further below) is an issue for the elderly as well as for children: more elderly people do not have spouses, and more of their children are divorced and thereby less able to help. Women's increasing labor force participation is another factor to be considered, given that women are the primary source of intrafamilial transfers of support.

As for the psychological status of the elderly, the commonly used measures should be applied with caution. One such measure is "life satisfaction." When asked, about 85 percent of people at all stages of the life cycle will say that they are satisfied with their lives. However, among the elderly, this response does not correlate as closely with their objective circumstances as is the case with other age groups. George speculated that there are two factors helping to explain this discrepancy between circumstances and perceptions: first, there is a general lowering of aspirations among the elderly; second, the question about life satisfaction can be interpreted as referring to one's life as a whole rather than one's life at the moment. Thus, the measure is somewhat suspect.

In discussing the psychosocial well-being of children, Zill addressed three questions:

(1) Is there evidence that the well-being of children is deteriorating?

(2) Are demographic changes involved in this deterioration?

(3) Would policy interventions and the provision of public services ameliorate the problems?

On the first of these questions, Zill cited data indicating deterioration:

- Teenagers were twice as likely in 1981 to see a psychiatrist or psychologist as they were at the end of the 1960s. Although this increase may partly reflect the greater availability of these services and greater sensitivity of parents to their children's emotional problems, Zill believes that it also indicates an increase in the proportion of troubled young people.

- The percentage of parents responding affirmatively when asked whether anything had ever happened to seriously upset or disturb their children increased from 27 percent in 1963-1965 to 37 percent in 1976. The cause most frequently cited was family disruption.

- The percentage of adolescent students described by teachers as needing help for emotional disturbances doubled from 1.3 percent in 1966-1970 to 2.7 percent in 1981.

Although the teenage suicide rate has increased, this is a questionable indicator of mental health, since the numbers involved are

small and since it is not always correlated with the highest levels of reported disturbance (e.g., black females are a generally disadvantaged group with high levels of depression but low suicide rates).

As to whether demographic changes are implicated in this deterioration in well-being, Zill again cited evidence in the affirmative. Between 1966-1970 and 1981, there was no significant change in the use of psychiatric and psychological services by adolescents in mother-father families, but a big change in mother-only and mother-stepfather families. There is a significant relation, Zill noted, between family disruption and several indicators of trouble, including seeing a psychiatrist or psychologist, antisocial behavior (as reported by teachers), and anxious or depressed behavior (as reported by parents). Family disruption is also a factor in some longer-term behaviors, including lower levels of educational attainment among those living in disrupted homes, early sexual activity among females, and earlier launching from home.

Finally, Zill suggested, the public provision of income and services probably could not ameliorate the deterioration in the psychosocial well-being of children. Many of the problems of troubled children are unrelated to income; a happy childhood depends generally on a stable family, which cannot be purchased.

A number of points were made in the ensuing discussion:

- The idea that psychosocial well-being depends on family stability applies to the elderly as well as to children; family disruption also affects the older people in the family.

- Because the provision of more money and services does not adequately address problems of psychosocial well-being, it is important to consider innovative policy options. For example, higher age at marriage is generally correlated with lower divorce rates. Thus it would be useful to think of ways in which society might encourage later marriage.

- Just as we must address the issue noted earlier of the responsibility of the childless for children, we must consider, too, whether children bear any responsibility for childless adults.

- There is a great demand for nursing home care that families cannot be expected to provide. According to Bane, the perfect predictor of demand for nursing home beds is the number of beds available. This demand is unlikely to be met by intrafamily transfers.

The discussion also focused on methodological issues surrounding the measurement of psychosocial well-being:

- As noted by George, life satisfaction measures are flawed. There are also difficulties with measures based on the utilization of psychiatric and psychological services. Use of these services may indicate not need, but rather a greater awareness of the value of preventive care. Similarly, the increased use of such services by the elderly may indicate a better referral rather than greater need. Thus, data

based on use measures may yield valuable indicators, but they should be interpreted with caution.

- Data reliability suffers when a person's condition is described by someone else, such as reports on children by parents or teachers. The best way to get information about children may be to ask them directly.

- Although the suicide rate is a limited measure of mental health, it is in fact our principal objective measure and therefore valuable, though it should not be given too much weight.

INTERNATIONAL COMPARISONS OF THE STATUS OF CHILDREN AND THE ELDERLY

Discussion focused on international comparisons between the United States and other countries, primarily European countries, in two areas: (1) income distribution and social expenditures and (2) health indicators and expenditures.

INCOME DISTRIBUTION AND SOCIAL EXPENDITURES

In her presentation of this topic, Kamerman addressed four questions:

(1) What social programs are provided for children and the elderly, and what are the trends in this area?

(2) What is the comparative impact of these programs on expenditures over time?

(3) What are the consequences of these programs and expenditures for the economic well-being of children, families, and the elderly?

(4) Are there any consistent relationships between demographic factors and social expenditures for either age group?

On the first of these questions, Kamerman observed that in European countries, the focus of programs is generally not on children, but on families. Moreover, the menu of income transfers for children is much more extensive in Europe than in the United States. The United States offers only public assistance (AFDC and food stamps) and the earned income credit. European countries offer, in addition to means-tested public assistance and other means- or income-tested benefits, universal child or family benefits and maternity or parenting benefits. In some cases, single parent allowances (universal or income-tested) are also offered.

For the elderly, the United States and Europe have a generally comparable menu of benefits, including statutory (and private) old age

pensions and supplementary income transfers (health insurance, tax benefits, and housing benefits).

Since 1960, there has been significant growth in benefits to children in European countries. For example, allowances have been raised, though generally still not indexed, and a variety of new types of benefits have been established. In general, Europe has seen an emergence of the family-benefit income transfer system. Trends in benefits for the elderly include an increase in eligibility, in inflation indexing, and in benefit levels.

On the second question--the impact of programs for children and the elderly on expenditures over time--Kamerman noted that, in 1981, pensions represented 40 percent of total social expenditures, health benefits (which go disproportionately to the elderly) represented 23 percent, and educational expenditures (which go disproportionately to children) represented 20 percent. Although expenditures on child and family benefits have increased in Europe, this increase has been less than that of pensions. The differential parallels that in the United States, but is smaller. Since 1960, pension expenditures have increased while family expenditures have declined in all Organization for Economic Cooperation and Development (OECD) countries. For example, in 1970 the ratio of elderly to child and family expenditures (excluding education) was 2.4, while in 1980 it was 3.5. This reflects a relatively constant proportion of total social expenditures devoted to the elderly together with a declining fraction devoted to child and family expenditures.

Regarding the third question--economic consequences for children and families and the elderly--Kamerman reported that children are economically better off than the elderly in some countries, and no worse off than the elderly in other European countries under consideration. However, there are variations within groups; for example, single-mother families are worse off than husband-wife families in European countries.

Kamerman's and other cross-national studies show that children in economically vulnerable families (such as single-mother families) are comparatively much poorer in the United States than in most European countries studied. Sweden, Norway, France, and West Germany are cited as countries in which children are comparatively well off.

Finally, Kamerman discussed the relation between demographic change and the levels of per-person benefits for children and the elderly. She found no simple relationship between a country's age structure and the economic well-being of the old vis-a-vis the young. That is, evidence contradicts the simple hypothesis that countries with high proportions of elderly and low fertility rates will have high pension benefits and low child allowances. For instance, both Sweden and the United Kingdom have higher proportions of elderly people than does the United States. But while Sweden provides more generous pension benefits than the United States, the United States is more generous than the United Kingdom. Similarly, West Germany has a substantially lower birth rate than Sweden or France, but its family benefit levels are lower, not higher. Other demographic variables, such as the female labor force participation rate, are similarly inefficacious in explaining levels and patterns of benefit allocation.

In sum, the role played by demographic factors in different patterns of social benefits for the elderly and children is not clear in a cross-national perspective. If demographic factors do have a role, then other variables are mediating the impact.

Following Kamerman's presentation, Smeeding described cross-national analyses of income distribution undertaken with the Luxembourg Income Study (LIS). The LIS comprises cross-sectional surveys for 1979 or 1981 of seven countries: the United States, Canada, West Germany, Israel, Norway, Sweden, and the United Kingdom. The data were edited so as to make definitions of households and income as cross-nationally comparable as possible.

For purposes of the study, the poverty line for a particular country was defined as income (adjusted for family size) of one-half of the national median level. On this measure, the United States had the highest overall poverty rate of all seven countries. The U.S. poverty rate for the elderly (20.8 percent) was slightly less than that of Israel, approximately equal to the United Kingdom rate, and much higher than that of the other three countries. Poverty among children was by far the highest in the United States, although all the countries had, to some extent, a problem with poverty among children in single-parent families.

Smeeding suggested that it was particularly interesting to look at the current experience in Sweden and the United Kingdom, because both feature an age distribution similar to that projected for the United States in 2025. Yet the two countries have taken very different routes. In the United Kingdom, 20.8 percent of the elderly and 10.4 percent of children are poor. In Sweden, there are essentially no elderly living in poverty, and only 5.2 percent of children are poor. This has been accomplished via extensive redistribution of income from wealthy to poor, along the lines suggested by Danziger earlier in the workshop.

In closing, Smeeding suggested that a cross-national comparison of political and institutional determinants of income distribution, in conjunction with the LIS data, could yield valuable insight. He also noted that the data he reported do not include noncash income, which is the next step to be taken.

In the discussion following Smeeding's remarks, a number of points were raised:

- It is important to consider absolute as well as relative poverty rates.

- Smeeding's analysis focused on post-transfer income and implicitly stressed the role of public transfers in affecting the distribution of income. However, there is presumably considerable pretransfer income inequality in all these countries. The LIS data sets are suitable for exploring the extent and determinants of pretransfer inequality.

- It is often suggested that universal programs necessarily have a broader constituency than means-tested programs and that this explains the greater U.S. support for Medicare and social security than for AFDC. But, although many European countries offer universal child allowances,

Kamerman believed that these programs still have less support than pension programs.

- A question was raised about the European data on asset measures. Kamerman responded that the asset data for Europe are not better than those for the United States and are used less. The asset picture is complicated by the incentive to hide assets, although it was suggested that analyses of these data are improving.

- It was noted that in the United States the distribution of income among the elderly will become more unequal with the growth in individual retirement accounts (IRAs), because these constitute a tax subsidy to individuals in the highest tax brackets. However, the growth in IRAs may also defuse opposition to taxing social security benefits.

- There is a significant gap between the number of people who qualify for benefits and the number who receive them. In fact, a large proportion of all the elderly who are poor in all countries receive no benefits. The reasons for this include an inability to handle the procedures involved, the administration of the benefits, and the stigma attached to receiving benefits.

- Is the stigmatization of benefits unique to the United States? Kamerman thought that in most countries, if a program is means-tested a stigma is attached, whereas programs that are universal or income-tested with a high ceiling (i.e., exclude only a small fraction with very high incomes) are generally not stigmatizing.

- There was some discussion of whether the lack of political support for child policies tacitly reflects prejudice against high-fertility minorities. It was suggested that the proportion and status of ethnic minorities may be an important factor in explaining cross-national differences in income distribution. For instance, Israel, the United States, and the United Kingdom seem to have both the highest poverty rates and the highest degree of ethnic heterogeneity. In addition, some degree of poverty among U.S. elderly may reflect the disproportionate presence of poor immigrants with relatively low levels of lifetime earnings.

- The relationship between national fertility rates and the presence of pronatalistic policies is a complex one. In France and Sweden, low fertility may have been a factor influencing the adoption of pronatalistic policies. In West Germany, however, there is a "collective neurosis" about pronatalism because of its association with Nazi-era policies. There has, however, been some discussion there of whether childless couples have failed to fulfill a social contract that requires younger generations to support the elderly. In any case, the evidence indicates that the effect of child benefits on fertility is mild, so that very high levels of benefits are necessary in order to induce small increases in fertility. Le Bras cited an econometric estimate

stating that if France subsidized the total cost of raising children, the total fertility rate would increase by about 0.5 (i.e., fertility would increase about 30 percent).

HEALTH INDICATORS AND EXPENDITURES

Zoellner began his discussion of this topic by recommending cross-national research as a means of gaining insight into the possibilities for institutional change. He then addressed two areas of concern: health status and health efforts. In the absence of reliable health status data, it is necessary to rely on mortality and life expectancy statistics as health indicators. Life expectancy in Europe has increased on average from about 65 to about 71 years, with the same male/female gap noted earlier for the United States. The main progress in life expectancy has been for infants and the elderly; there has been no improvement for the middle-aged groups, especially males. This latter fact is due primarily to health-damaging behaviors, especially smoking. Most cause-specific mortality rates have declined in Europe (except for deaths from uterine cancer and suicide).

According to Zoellner, it is extremely difficult to compare health expenditures internationally. Even intranational data is plagued by inconsistent reporting. The problem is compounded by the difficulty of accounting for care provided by families in the home.

However, two important generalizations emerge: (1) the growth in health expenditures in Europe has had little to do with improvements in health and (2) the growth of the elderly population has had little to do with the growth in health expenditures. If we look at age-specific rates of expenditures, all groups are similar except for the very old, which will always be a relatively small group. Thus the aging population is not seen as a major concern in terms of health expenditures in Europe. Rather, the problems are mainly structural, relating, for instance, to policies determining whether care takes place in hospitals, nursing homes, or the community. Thus, the concern is focused on issues of institutional reform, the need to find out what the elderly really want, questions of who pays for what, and the need for intermediate types of care.

Following Zoellner's presentation, Etheredge discussed a number of issues related to health indicators and expenditures.

First, there is a risk of myopia in focusing concern on particular population groups. For example, adult males are generally neglected. Infant mortality and mortality among the elderly have declined, but male heads of family have not benefited as much.

Second, the international comparisons cited earlier indicate that the United States is doing comparatively well for the elderly but much worse for infant mortality than the rest of the developed world; infant mortality rates among minorities in the United States are especially high. This is a priority research area with potentially high payoffs. Etheredge expressed the opinion that infant mortality is a more critical concern than the problems of psychological stress and suicide.

Finally, Etheredge addressed the issue of the relationship between health care and health spending. In the United States and throughout the developed world, there has been a great increase in health spending as a proportion of gross national product, regardless of institutional arrangements. The U.S. health care industry, by itself, would rank as the world's eighth largest economy. Yet we have only limited evidence on the relation between these massive expenditures and the health of the population. The data are perfectly consistent with the hypothesis that health care expenditures are entirely technology-driven. (In ensuing discussion, it was suggested that health care expenditures may be more important in reducing disability, e.g., via hip replacement and cataract surgery, even if they have little effect on mortality rates.) In order to understand the effects, if any, of medical expenditures, research is needed on the actual content of medical care.

CAUSES AND CONSEQUENCES OF CHANGES IN FAMILY STRUCTURE

Thornton opened the discussion by emphasizing the fundamental importance of the family in understanding the economic, physiological, and psychosocial well-being not only of children, but also of people of all ages. Although family structure does not explain everything and may not even be the major story, variations in family structure have important outcomes in the way we live our lives. He addressed four concerns in his presentation: trends in family structure in Western societies, racial differentials, the consequences of these trends, and their causes.

In reviewing family structure trends in Western societies, Thornton made the following observations:

- The post-World War II marriage boom lowered age at marriage and increased the proportion of the population ever married; the last 15-20 years have seen a reversal of both of these trends.

- Divorce has been increasing since the middle of the nineteenth century, but around 1960 it shot up dramatically. If the rates of the late 1970s were to hold, about one-half of all marriages would end in divorce. However, in the last 2-3 years, there has been a leveling off and even a small decline in the crude divorce rate.

- Fertility has been declining in the United States since the nineteenth century. It declined steadily through World War II, rose temporarily with the postwar baby boom, and now is below replacement level.

- There has been a general increase in cohabitation.

- There has also been an increase in independent living among both young adults and the elderly.

- In preindustrial Western societies, home and career were combined for women. In the first part of the twentieth century, these areas became separated, with women involved primarily either with home and family or a career. This trend has reversed in the last few decades with an important difference: the work is now done outside the home.

- Among the young, there has been an increase in sexual activity. In the 1970s, this increase was dramatic, as was the attendant increase in premarital pregnancy, abortion, and the extramarital birth rate.

- The combination of the declining proportion of people married, decreased marital fertility, and increased extramarital fertility has had a dramatic impact on the proportion of children born outside marriage. Over the past 25 years, the proportion has increased from about 4 percent to about 20 percent. At the same time, as a result of the decline in marriage and remarriage, combined with the increasing divorce rate, about 20 percent of all children live in single-parent families--a marked departure from the past.

Thorton also pointed out important racial differences in these demographic trends:

- Marriage rates among blacks are much lower than those among whites.

- The black divorce rate is higher.

- Blacks remarry more slowly and are less likely to remarry than are whites.

- Childbearing outside marriage is much higher among blacks than whites (representing 50 percent of black children versus about 10 percent of white children).

It is often suggested that the absence of the father in single parent black households is compensated for by the presence of other adult relatives. However, recent work by Hernandez and Myers has shown that this extended family picture is not, in fact, observed to a great extent, at least not in the sense of other family members residing in the same household. We do not know how much social support is provided by extended family members living outside the single parent's household.

Turning to the consequences of the trends in family structure summarized above, Thornton underscored the negative effects. He suggested that if these trends had not occurred, families would be 10-20 percent better off economically. In addition, differences in family structure probably account for one-quarter to one-third of the differential in economic well-being between white and black families.

There are no good explanations for these family structure changes. The usual, long-run explanatory factors--industrialization, urbanization, education, and so on--do not fully account for the especially rapid changes of the 1960s and 1970s. Public policy is often cited as an influence on family structure, but the evidence for an effect of welfare benefits on family formation or stability is unclear. Cross-sectional analyses show no demographic impact of welfare benefits, while income maintenance experiments indicate a possible effect. More research is needed on this question as it relates not only to

welfare levels, but also to housing programs, programs for getting pregnant adolescents back in school, and the like. A number of these public policy areas deserve more research attention.

In his discussion of changes in family structure, Le Bras addressed three topics: major demographic changes in Europe in the last 10-20 years, the consequences of these changes for housing and kinship, and differentials between Europe and the United States.

On the first of these topics, Le Bras noted the following general trends in Western Europe:

- A decrease in fertility;
- A lengthening of birth intervals;
- An increase in the mean age at first marriage and thus at first birth;
- An increase in divorce rates;
- A decline in the number of large families; and
- An increase in the proportion of births outside marriage.

While these general trends are observed throughout Europe and the United States, there are important differentials between countries:

- The total fertility rate for the Federal Republic of Germany is 1.3, for France 1.8, and for Ireland 2.3 to 2.4.
- The marriage rate (sum of age-specific rates) is 0.50 for Sweden and 0.90 for Czechoslovakia (the latter figure relates to that country's rising fertility rate).
- The onset of nuptiality decline was much less homogeneous than the decline in fertility. The turning point for nuptiality was 1960 for Sweden, 1972 for France.
- Variations in the divorce rate reflect cultural differences, with northern Europe having the highest rates and southern Europe the lowest.

Turning to the consequences of these changes, Le Bras noted that many people have interpreted them as portending the disappearance of the family unit. For instance, Table 1 shows the projections that have been made of the proportion of women born in 1940 and 1960 who will still be married on their fiftieth birthday.

But Le Bras suggested that fears of the disappearing family may be exaggerated. In particular, the popular notion of the prevalence of single-person households, with the implication that loneliness is a serious social problem, may be based on faulty statistical reasoning. It is true that 24.6 percent of French households consist of only one

TABLE 1 Proportion of Women Married on Fiftieth Birthday (percentage)

Country	1940	1960
England	78	54
Denmark	77	37
France	81	65

person; but only 9.1 percent of French individuals live in such a household. Conversely, only 1.0 percent of households consist of more than six people, but these households comprise 5.6 percent of the population. While single-person households are concentrated at two age groups--20-25 years, and over 60--for no age group is the mean individual-weighted household size less than 2. In fact, 17.0 percent of the population lives in extended families, almost twice the number who live alone.

For a more comprehensive picture of family structure and its implications for social support, we need to understand kinship networks. While kinship data have always been sparse, progress is being made in the use of surveys, genealogical data bases, and microsimulations.

Finally, turning to a broad theme of the workshop, Le Bras contrasted American and European views of intergenerational equity. Americans, he said, have a cross-sectional view of equity, comparing the well-being of the young and old at a particular point in time. In contrast, Europeans have a more longitudinal view, comparing the well-being of two individuals over their life course.

Following Le Bras' presentation, Cherlin offered three comments on the issue of family structure changes:

- Attention should be given to the question of whether changes in family structure represent a policy issue.

- Kinship networks are important but little understood. Research is needed to determine, for example, what proportion of the long-term poor are tied into such networks and with what implications.

- The most surprising finding emerging from the discussion was the fact that family structure seems to play only a modest role in the deteriorating situation of children. We need to examine the rest of the story, for example, the role of income distribution differentials.

Cherlin then discussed the relation between the elderly and children within families, specifically the role of grandparents as "mediating structures"; if the elderly are doing relatively well and children relatively poorly, is there potential for some intrafamily transfer? Two related issues arise:

- In principle, it would be possible to encourage directly the transfer of income from the old to the young within families. However, this approach would probably be of limited effectiveness for two reasons: (1) poor children tend to have poor grandparents and (2) U.S. families have moved toward generational independence. In this country, there is not much transfer of funds between generations, and our culture supports this.

- There is an increasing call for grandparents to help improve the psychological well-being of children. This role, too, could probably be only modest for several reasons. First, as noted above, our society prefers the generations to be independent. A second factor is the geographical mobility of the population. Finally, it may be unfair to expect the elderly to bear this additional burden.

In sum, discussants concluded that "grandparents are not a good instrument of public policy."

General discussion followed. There was considerable debate on whether qualitative differences existed between blacks and whites in the family structure/poverty nexus. Bane summarized her recent research data:

- For white families, a change in family structure, such as divorce or single parenthood, results in a deterioration of the family's economic situation.

- For black families, poverty is pervasive. Structural economic factors seem to be at work: the fact that 50 percent of young black women are pregnant but unmarried is not unconnected to the 50 percent unemployment rate among young black men. She concluded by citing University of Chicago sociologist William Wilson's opinion that the economic status of blacks is deplorable, adding that things have gotten worse.

Bane's analysis prompted both technical and substantive discussion. Danziger agreed that the level of black poverty was deplorable but denied that things were getting worse. He cited evidence showing that the pretransfer poverty rate among two-parent black families had declined sharply over the period 1965-1983, from 41 to 24 percent; two-parent white families, while much better off, nonetheless displayed a deteriorating trend over the period, with pretransfer poverty increasing from 10.6 to 13.1 percent. Similarly, the poverty rate among single-parent black families declined from 80 to 69 percent, while that of white families increased from 48.5 to 50.1 percent. Danziger's point was rebutted by others, who pointed out that, although black poverty rates declined, holding family type constant, the massive compositional shift of family types away from two-parent families resulted in a worsening of the situation of the black population as a whole.

There was also debate on whether changes in family structure among both blacks and whites were reflections of the same underlying phenomenon. Kamerman compared trends among black Americans to those in Sweden,

while Cherlin asserted that the separation of childbearing from marriage among blacks represents the appearance of a tremendously different family structure from that of whites. Along these lines, Zill cited survey data showing a change in values among blacks; black teenagers now have the normative expectation that they will have children before marriage. Smeeding proposed that premarital childbearing among black women was a rational response to the lack of employment opportunities, but this was disputed by several participants. Thornton said that the reasons for early childbearing among blacks were not at all clear.

Palmer addressed the question of what factors, in addition to family structure change, were responsible for the observed deterioration in children's economic well-being. He proposed the following:

- The recent recession--children in low-income families are most vulnerable to downturns in the business cycle;
- The decline in public benefit levels for poor families;
- The depressed wages of parents in the baby boom generation; and
- Growing income inequality, reflecting the deteriorating wage and employment picture for low-income males. This is attributed to structural economic change but is poorly understood.

THE POLITICAL ECONOMY OF CHANGING AGE AND FAMILY STRUCTURES

The session on the political economy of demographic change focused on the impact of an aging society, with two broad themes: (1) the prospective fiscal and economic impact of demographic change on the assumption that current policy remained in effect and (2) the effect of demographic change on policy formulation.

Palmer began by briefly reviewing the remarkable growth of public welfare expenditures over the postwar period. Between the early 1960s and mid-1970s, public social welfare expenditures grew from 10 to 15 percent of gross national product (GNP). Since the mid-1970s, growth in these expenditures has slowed dramatically; while they are still increasing, they are no longer growing faster than GNP. The great bulk of this spending is on children and the elderly, with more also being spent on the disabled. For children, the major expenditures are for education, AFDC, and food stamps; for the elderly, they are for social security, Medicare, public employment pensions, Medicaid, and food stamps. The ratio of public spending on the elderly to spending on children was about 3:1 in 1979 (according to Bane); this proportion has been growing slightly over the past 30 years.

This increase in social welfare expenditures represents a massive redistribution of income from workers to the nonworking population. While some of this increase would have occurred even without legislated increases in benefit levels (because of the aging of the population), most of the increase in social welfare expenditures subsequent to the passage of Medicare in the mid-1960s has resulted from increasingly generous per capita benefit levels, especially for the elderly. To some extent, this was made possible by a decrease in the proportion of public expenditures devoted to the military. More important, though, the increased generosity of benefit levels was facilitated by consistently strong economic growth. Real economic growth exceeded 2 percent per capita annually--a doubling of real per capita income over the postwar period--despite the decrease in labor force participation among the elderly. The resultant growth in the size of the economic pie made it both economically and politically feasible to devote a larger slice to social welfare.

In addressing the present and near future, Palmer observed that a distinction must be made between economic and political limits to public expenditures. In his view, moderate expansion of the U.S. public

sector need not have serious detrimental effects on economic growth; many Western European countries were able years ago to devote larger proportions of GNP to public expenditures without serious consequences. (They may now have reached a limit.) The issue is how to raise and spend the money, not the levels of expenditure. Thus, while there are no serious economic constraints to the growth of the public sector, there are, at least in the near term, budgetary and political constraints. In the short run, the pot is not growing, so a dollar spent on one program is a dollar less spent on something else. Palmer noted further that since expenditures for the elderly are mostly federally financed and those for children locally financed, public money may be tighter for the elderly and more available for children in the near future, fiscal pressure being more serious for the federal budget.

In the long run, Palmer observed that public consensus, practical politics, and the performance of the economy will all play a role in public social welfare expenditures. Demographic change will also play a role, primarily because of the aging population; for example, the relative proportion of the population that is working is an important factor. The question is to what extent this shift in the age structure of the population will put upward pressure on expenditures for the elderly at a time when the baby boom generation will be retiring and economic growth is likely to be slowing.

In turning, then, to the impacts of demographic change on the growth of the economy and on public expenditures, Palmer noted that increases in per capita income are driven by the rate of growth of the labor force relative to the total population and by the rate of growth of output per worker. Demographic change will be a positive force for per capita income growth during the next 25 years because the ratio of labor force to population growth will be favorable compared with the average postwar experience. In the period thereafter, however, when the baby boom generation retires, the ratio of labor force to population will decrease dramatically, thus dampening growth in per capita income. At the same time, there will be upward pressure on pension and health care expenditures.

However, modest but sustained productivity growth would permit significant increases in the working population's after-tax income while providing adequate support for the elderly population. In other words, if workers 40 years from now are willing to accept a "mere" 90 percent increase in real per capita after-tax income (relative to today) rather than a 100 percent increase, the demographic pressure on public expenditures can be met through increased taxes. Some qualifications on this conclusion may be necessary in the area of health care, which is harder to predict than pensions. But given the crucial assumption of continued economic growth, it appears that fears of the burden of an aging society are greatly exaggerated. (Peterson commented that this may be an overly optimistic scenario. If the past decade's stagnation in productivity growth continues over the long term, the picture will be different.)

Turning to the issue of intergenerational equity, Palmer observed that this issue can be examined from three angles: the intratemporal or cross-sectional (children versus the aged), the longitudinal or

life-cycle, and the intertemporal (current versus future generations). In his view, discussions of intergenerational equity are often misguided. The impact of demographic change on economic growth will be positive in the near term, and longer-term budgetary pressures will not be very severe if a reasonable rate of long-term economic growth is maintained. Thus, there is no compelling reason to pursue policies of sacrificing present consumption for faster economic growth beyond what we would normally be concerned about for other than demographic reasons. Thus, it is more important to focus on reducing the trade and budget deficits. It is also important to note that some adjustments to demographic change are already built in. Social security will be generating large trust fund surpluses, and savings for private pensions are growing. The best way to look at distributional questions is not children versus the elderly, but the less well-off versus the more well-off. There is a need to do more for children and for the low-income elderly, while the affluent elderly do not need more expenditures. Tax subsidies, such as those embodied in IRAs, are grossly inequitable and should be eliminated, since they primarily benefit the wealthy.

Following Palmer's presentation, Preston, whose 1984 Population Association of America address inspired the workshop, summarized some key points of that paper, which he said represents more of a social history than a policy statement. In attempting to understand changes in social welfare policy, Preston used the premise that people vote and behave politically, in part, according to their self-interest. It follows that demographic shifts can affect the balance of self-interest in a society.

For instance, a recent Conference Board survey of 3,000 households reported that 84 percent of the respondents opposed cutbacks in social security, while more than two-thirds favored reductions in public welfare spending. Preston suggested that this resulted, in part, from the demographic balance of self-interest:

- Social security enjoys the support not only of the elderly, but also more important, the working adults who are planning for their own old age as well as currently supporting their elderly parents.

- In contrast, it is an obvious but powerful fact that adults do not plan for their own childhood. Adults with children are the most obvious supporters of children's programs; evidence from voter studies (see Chomitz, in this volume) shows that voters with children support higher levels of school expenditures, for instance. However, in 1982, only 38 percent of all voters were in a household that included children. Exacerbating this demographic imbalance is the fact that minorities constitute a disproportionate number of children, especially poor children; as a result, welfare allocations may be lower in the United States than in a homogeneous society such as Sweden.

Preston suggested that the demographic shifts of the past two decades have acted to favor expenditures on the elderly. Furthermore, this effect may have been intensified by a growing trend in U.S. society toward individualism, so that people tend to act and vote somewhat

more out of self-interest and somewhat less out of altruism or public-spiritedness. While acknowledging that we lack a good theoretical framework to understand this kind of cultural change, Preston cited both attitudinal and behavioral indicators of an increase in individualism. Since 1957, for instance, divorce and teenage suicide have increased, while fertility and church attendance have declined; these trends are paralleled in Europe. It is interesting, however, to compare Japan, which is generally acknowledged as being a much less individualistic society than the United States, and which has witnessed a long-term decline in the divorce rate. Consistent with this lower degree of individualism, Japan has less public funding of retirement, a much higher proportion of elderly living with their offspring, and a more rapid expansion of schooling.

It is important to note, as Palmer did, that the proportion of elderly people in the population has both supply and demand effects on expenditure allocation. During the 1960s, the smaller proportion of the elderly in the population meant that it was relatively easy for the rest of the population to be generous. Now, although programs for the elderly may have greater political support, the cost of serving the larger population is a much more salient factor. The countervailing supply and demand effects may account for Kamerman's finding of no significant demographic effect on per capita expenditures in a cross-section of European countries.

Following Preston's remarks, Binstock offered two propositions about the aging of the population: (1) It does not significantly redistribute power in society and (2) It does change the issues on the public policy agenda.

In support of the first proposition, Binstock disputed the thesis that self-interested voting by age groups shapes public policy on three grounds. First, voting is not a major source of political power. Second, voters are typically faced with a choice among candidates, not issues; the process by which voters translate their multiple sets of interests into a candidate choice is best understood in Herbert Simon's framework of "bounded rationality," rather than as an optimal decision under complete information. Finally, there is abundant evidence that the distribution of elderly people's votes among candidates is almost identical to the voting pattern of the population at large. That is, elderly people do not vote as a bloc, and organizations "representing" the elderly have not demonstrated a capacity to swing the votes of even a small portion of older voters; such organizations exercise a limited form of political power by threatening to mobilize elderly voters.

Social security and Medicare, he continued, were originally enacted and importantly amended in contexts of social, political, and economic conditions greatly different from those of today. The initial passage of such legislation and subsequent amendments were due not to a massing of self-interest by the elderly, but to the actions of public sector elites. However, the aging of the population has greatly changed the context and impact of such programs as social security and Medicare. This change has prompted the reexamination of those programs and the suggestion of such policy reforms as more extensive means-testing of benefits. Many of the resultant choices can be understood as involving

equity between rich and poor. The framing of these choices in terms of conflict between age groups, with the elderly as scapegoat, may have the ironic effect of crystallizing the elderly into a homogeneous voting bloc, creating intergenerational conflict where it did not exist before.

Peterson opened the general discussion by commenting that expenditures on education are not closely related to student achievement. Evidence indicates that the home environment, however, is a very important determinant of student achievement. The ongoing changes in family structure may therefore represent a much more serious threat to education and human capital formation than any tendency of aging societies to allocate money away from education. The question, then, is whether private investments in human capital formation are declining, without any compensating increase in public sector activity.

There followed lively debate on whether the political power of the elderly accounts for current public expenditure patterns. It was proposed that politicians act as if the elderly voted as a bloc, whether or not they actually do. Rebuttals stressed the complexity of the coalitions that supported social security. It was again proposed that a more useful perspective on public policy views the conflict as one between rich and poor, rather than young and old. For instance, $56 billion in foregone revenue is due to the deferral of taxes on employer pension contributions; this benefit goes overwhelmingly to the wealthiest segment of society, as does the $25 billion in home mortgage deductions.

There was consensus, however, on the proposition that too little is spent on children, and that this was the central concern of the workshop. Why do we spend so little on children if not because of demographically induced age bias? A proposed answer was that fundamental social norms in our society dictate that people must support their children, but not their parents, and that there are deserving poor and undeserving poor. The elderly are seen as deserving poor, eligible for public support. Poor children, however, can only be helped indirectly via financial aid to their parents, and poor parents are seen as undeserving poor. There is great concern about adverse work incentives, and family break-up incentives associated with offering welfare to the parents of poor children.

IMPLICATIONS AND NEXT STEPS

At the close of the workshop, participants examined the implications of the discussions summarized above. Heclo opened the discussion with his reaction to the previous afternoon's debate on the political economy of demographic change. He did not find the demographic model of policy formulation to be compelling; there is a long and tenuous chain of connections between numbers of people on one hand and policy outcomes on the other. To the extent that numbers have power, that power is negative or reactive--that is, groups of beneficiaries may lobby to prevent the loss of existing benefits. But to understand policy outcomes it is important to look beyond beneficiaries to suppliers, addressing such issues as tax breaks on employer benefits and housing, and the power of insurance companies, employers, and the construction industry. Heclo also observed that, although conflicts among interest groups exist, few politicians would agree that we should take from the old and give to the young; rather, they would say we should shift from areas of lesser to greater need.

Heclo then outlined two important areas for further research. The first problem is to determine what conditions of living are unacceptable and demand intervention. Simple income-based poverty measures, determined by an arbitrary poverty line, are not adequate for this purpose. Rather, we need to develop a more precise "lexicon of dependency." At present, there is a lack of an agreed-upon language for discussing dependency and need that can be used by policy makers. Such a lexicon would be applicable to all age groups and would define what constitutes marginal living; it would be based on lives as people live them, not on categories that researchers find convenient. The proposed lexicon would draw on a variety of disciplines, using micro and macro data to explain what constitutes dependency and need and to identify their characteristic patterns.

The second area for further research identified by Heclo relates to a clearer conception of the real political constraints in public attitudes toward dependency. Preconceptions about political constraints can represent a self-imposed straightjacket. From a program design perspective, for instance, the issue arises of how to design a program to be more discriminating among beneficiaries without making it more politically vulnerable. At present, all we have are responses to poorly framed survey questions such as "Are we spending too much?" This

information is inadequate. We need to examine the "deep structure of public attitudes"--what they are, how they vary among groups, and how they might be changing. This involves not only attitudes toward public programs, but also more fundamental social norms about responsibility--of the childless for children, of parents for children, of children for parents, of parents with children for the childless elderly.

In summary, Heclo suggested that research should not be directed toward the demographics of the policy process, but rather toward the meaning and experience of obligation. At best, by clearing away the underbrush of misinformation, we might be able to make suggestions for alternative ways of thinking about dependency and need. This might in fact be the best link between research and policy.

Peterson commented that, while we should not overemphasize the intergenerational conflict perspective, we should nevertheless keep in mind the significance of the original issue posed for the workshop. Why did the issue of intergenerational equity arise? It was suggested that the root of the issue lies in the shift from a growing to a slow-growth or stagnant economy, that there is a need to adjust social policies to these realities. The issues addressed by the workshop would be more easily resolved if the economy returned to a rapidly growing one. Thus the real issue is how social policy should adapt to a slow-growth economy if that is what the future holds. It would be easy to continue the pattern of extending privileges to some and withholding them from others. Policy analysts could encourage political leaders to think less of following this route and more of restructuring policy so there is a more equitable relationship among cohorts. This would be in accord with Heclo's suggestion that we think in new ways about dependency and need.

Preston suggested that we should not dismiss the linkage between changing demography and policy shifts, which needs a spot on the research agenda. There is much evidence suggesting this linkage.

Riley observed that this is a century in which the numbers of the old have increased far beyond any historical experience. This will become more of a concern with the extension of longevity, together with the size of the baby boom cohort. The result will be huge impacts on all social and economic structures, including the family (e.g., the number of generations living at the same time) and the labor force. The experience of dependency in people's own lives is changing. However, social structures and public attitudes have lagged behind these major demographic changes.

Following this discussion, Morrill outlined three questions to be addressed:

- What are the policy implications and urgent issues arising from the workshop?
- What are the related research needs?
- Are there relevant and appropriate National Research Council activities?

Morrill prefaced his comments with a policy maker's view of the complexity of the policy-making process. Policy outcomes, he said, are driven by a set of ingredients including knowledge, leadership, political forces (constituencies and organized groups), and important contextual factors that define political "windows of opportunity" when change can take place.

In turning to the question of policy implications, Morrill suggested that there is less to the issue of intergenerational conflict than meets the eye. Constituencies clearly matter, especially if they are large and well-organized; however, they cannot overcome all the other aspects of policy outcomes, especially if the latter are running in a different direction. Moreover, we can formulate a normative judgment that intergenerational conflict is undesirable and unappealing as a basis for conclusions about policy or research. Morrill noted three policy implications arising from the workshop discussion:

- The problem of poverty among black children is an urgent issue with damaging long-run implications for society.

- There is a longer-run issue of underspending on dependent children and the less well-off elderly versus overspending on the well-off elderly.

- With reference to the fact that most programs for the elderly are at the national level and those for children at the local level, we need to address the issue of heterogeneity within age groups. The diversity of the elderly suggests the decentralization of programs to deal with individual circumstances, something the federal government is not good at doing. For children, income transfer works well enough at the federal level, but the provision of services does not. Therefore, how to serve children while maintaining diversity among the states in their approaches is an important question.

As regards research needs, Morrill suggested that new needs have arisen from research successes. We have a better understanding of things in the aggregate, but better information is needed about population heterogeneity. Longitudinal studies, to the extent that they are affordable, along with profiling and ethnographic work, are needed as well as studies of consumption among children, as noted earlier.

Finally, concerning possible activities for the National Research Council, Morrill suggested that the age-conflict issue is not a promising topic. Rather, an effort to reexamine the lines of family responsibility drawn through the life cycle would be a more fruitful approach.

Discussion centered on the following points:

- Policy outcomes may be attributable not to demographic change, but to a combination of ignorance followed by inertia; that is, policy sometimes arises from fairly trivial sources, with consequences that cannot be anticipated and are difficult to change. Consider, for instance:

-- Why was the age of retirement lowered either statutorily or through incentives at the same time life expectancy increased?

-- Why was renal dialysis included in Medicare?

-- Did anyone anticipate what would happen to inflation when social security and pensions were indexed?

• In trying to explain the current situation, we should keep in mind the issue of resources. It would take about $50 billion to eliminate poverty; $300 billion is spent on programs for the elderly. The issue is actually the mismatch between the sense of what is needed and what is being done. It might be useful to focus less on the complex reasons for this mismatch and more on what will be done about it. The public is becoming aware that some people are getting more than they need and others less, as is evidenced by recent policies to tax social security benefits and require public employees to pay payroll taxes. While it does take time for such policy shifts to occur, they do in fact happen. In this connection, Heclo's point about the need for a lexicon for dependency and need is important.

• However, it is important to remember that solving the poverty problem for children is very difficult, and cash alone is not the answer. For example, among 1 million children below the poverty line in New York State, 75 percent receive welfare benefits that, counting non-cash benefits, put them over the poverty line. It would not take much additional money to boost everyone over the poverty line. However, most of those in poverty are totally dependent on welfare and do not work. The larger problem is that of mothers who do not work, fathers who do not take responsibility, and the size of the group of people who are on welfare and remain there, which probably represents half the caseload.

• As noted earlier, much better information is needed on why people behave as they do: why teenagers have children, why families break up, and so on. It was suggested that there should be more emphasis on these behavioral issues rather than on political-economic issues.

Following this discussion, several workshop participants outlined suggestions for next steps, with particular focus on research issues.

Zill suggested that the emphasis should not be on infant mortality, which has improved dramatically over the last several decades, but on the behavioral problems of youth or the process by which they are socialized. U.S. crime rates are very high relative to those of other countries, as is the rate of unintended pregnancies; other problems include higher smoking rates among teenagers, drug use, violent behavior generally, and high homicide rates. These problems are especially acute among minority and low-income youths. Ways to socialize young people and transmit values to them are vital concerns; feeding children and giving them medical care are not enough.

Rein suggested that Preston's major contribution to the discussion of the issues addressed by the workshop is both fundamentally right and

fundamentally wrong. Preston has formulated an intractable problem: when faced with such a problem, we must attempt to reformulate it. This can be accomplished in part by focusing on the concept of need rather than ages, as suggested by several of the workshop participants. It is also important to consider the points made about the structure of the political process that can be used to accomplish this refocusing, including notions raised during the workshop about constituencies, political elites, and policy windows. Rein also suggested three areas for further work:

- Health--In the absence of a workable concept of health status, four different concepts are discussed--morbidity, mortality, chronicity, and disability. These concepts could be disaggregated and discussed by age and by what is done for different groups on each; the health issue should be redefined in this way.

- Employment over the life course--In both the United States and Western Europe, there has been a consistent postwar trend toward delayed entry into the labor force and accelerated exit. Palmer suggested that the trend toward early retirement reflected rising real income level, which allows people to spend a larger proportion of their life in leisure. Public policies may also play an important role. The consequences of this trend for the distribution of well-being over the life course are also not well understood. International comparisons may be helpful in understanding this phenomenon; for instance, it is much more marked in Germany, France, and Holland than in Sweden or Great Britain.

- The underclass--There is a great ignorance about the issue of long-term dependency and black youth and the tendency for it to involve single-parent families. Research is needed on the dynamics of these problems and plausible policies for addressing them.

Finally, Thornton suggested a dual research agenda. First, he suggested that there is a need to know much more about the transition to adulthood, including the decisions of teenagers about education, labor force participation, and childbearing. These decisions play a crucial role in determining the well-being of the next generation. (Goslin noted that the National Research Council's Commission on Behavioral and Social Sciences and Education was currently working on some of these questions.)

Second, there is a need to look at what policy has done to people's behavior, as opposed to direct effects such as income transfer. For example, how much of the shift in concern from families and households to individuals, as noted by Preston, grows from public policy, which treats people as individuals, not families. Many people think that such policy has negative impacts. Our information on this question, largely cross-sectional rather than longitudinal, is inadequate, and more research is needed.

Much of the closing discussion emphasized the need for basic descriptive studies addressing heterogeneity in the population of such things as wealth distribution, kinship ties, intergenerational exchange,

and use of public services. A number of relevant surveys are under way or under development:

- The Survey of Income and Program Participation (SIPP).

- The Institute for Social Research at the University of Michigan is doing a longitudinal study of assets and pension wealth.

- The National Institute of Child Health and Human Development has two efforts under consideration: a multilevel national survey combining demographic, economic, and developmental psychology approaches; and a massive national survey of families emphasizing kinship networks, with the possibility of longitudinal follow-up.

- The National Center for Health Statistics is undertaking a Child Health Supplement and a Supplement on Aging to the Hispanic Health and Nutrition Examinations, designed to serve as the basis of a longitudinal study.

The National Research Council may be able to play a role in coordinating analytic and methodological approaches to the use of these new and highly complex data sets, as well as assessing the results of research using them.

At the close of the workshop, Binstock commented that, although he disagrees with Preston's demographic model of politics, we should appreciate what Preston has pointed out about the implications of demographic change in bringing about a different kind of society.

SUMMARY OF CONCLUSIONS

- <u>The relative economic well-being of children has declined over the past two decades, while that of the elderly has increased. However, these trends in group means obscure tremendous within-group heterogeneity</u>.

The increase in well-being among the elderly reflects the increasing lifetime earnings of successive cohorts of elderly people, as well as the increasing beneficence of public expenditures on their behalf. The decline in the well-being of children is less well understood. The depressed wages of parents in the baby boom generation, together with declining federal support for children, are contributing factors. Although the growth in child poverty is associated with the growth of single-parent families, the causal relation is not clear; it is possible that both family structure change and the growth of poverty are symptoms of more fundamental economic and social problems. Moreover, some of the improvement in the relative well-being of the elderly is due to period factors and will not continue.

It is dangerous to generalize, however, about "the young" or "the old". While great progress has been made in eliminating poverty among the elderly, some elderly people remain poor. Conversely, a significant

proportion of children are from affluent families. There is limited evidence of increasing polarization between rich and poor within both groups.

Noneconomic measures of well-being are difficult to measure and interpret. While significant reductions in mortality rates have been realized, particularly for the old, trends in morbidity and disability are less clear. Measurement is even more difficult for psychological and social aspects of well-being. Increasing use of psychiatric services by the young may reflect either increasing problems or increased service availability. It is equally difficult to generalize about changes in suicide rates. Increases in the average educational level of mothers, particularly among blacks, may represent an overlooked gain in children's well-being.

- Public policy is formulated on the basis of both supply and demand factors. Thus, age structure alone is not a major determinant of public policy formation.

A useful distinction was made between supply and demand effects of age structure on public expenditures. On the demand side, an aging population requires more medical care and less education. Thus, even if public policy maintains existing per-pupil and per-patient spending guidelines, expenditures on health care will increase and expenditures on schools will decrease.

The workshop's interest focused on the supply or policy formulation side. Suppose that parents of young children favor slightly higher per-pupil public expenditure on education and slightly lower per-person expenditure on social security and Medicare. Suppose that the elderly and their working-age children have the converse preferences. If legislators tend to follow the median preferences of their constituents, an aging population will tend disproportionately to favor the elderly over the young.

The political scientists present at the workshop found this to be a weak model of the policy formulation process. In particular, they questioned the role of issue-based voting as a determinant of public policy. While there is evidence that voters with children favor larger per-pupil school expenditures (see Chomitz, in this volume), single-issue-based referenda such as school bond elections play a minor role in overall policy determination. The political scientists and policy makers suggested that elites and narrowly focused interest groups play a much larger role. In the long run, changes in social norms regarding dependency, individualism, and intrafamilial support may be the most important determinants of public policy toward children and the elderly. And it is possible that changes in age distribution affect these norms.

Newly available cross-national comparisons of income distribution show no simple relation between age structure and the relative well-being of young and old. For instance, both Sweden and the United Kingdom have age distributions similar to that predicted for the United States in 2025--that is, a substantially larger proportion of elderly people than the United States of 1986. If age structure were the major determinant of income redistribution, we would expect both these

countries to have less poverty among the elderly than the United States and more poverty among children. Yet in Sweden, poverty among children is small by U.S. standards, and in the United Kingdom, poverty among the elderly is much more pervasive than in the United States.

- "Intergenerational conflict" is not a useful framework for research or policy.

There are two distinct senses in which the term "intergenerational conflict" is used: conflict between those who are young and old at a particular point in time, and conflict between age cohorts, such as the baby boom generation versus their children.

In the first sense, conflict can arise in the short term among groups competing for shares of a more or less fixed budgetary pie. However, the rationale for focusing on the young-versus-old distinction is unclear, given the tremendous disparities within both groups in terms of income and public benefits. For instance, substantial tax subsidies are directed at wealthy families containing both old and young, while others in both age groups--especially those just above the poverty line--lack adequate medical insurance. The workshop participants favored paying more attention to needs within all broad demographic groups, and many advocated such policies as taxation of social security, elimination of purely age-based (rather than needs-based) benefits and tax exemptions, and elimination of regressive tax subsidies such as IRAs as a means of being fair to all.

In general, the workshop participants found it more meaningful to talk of equity between individuals over the life course, rather than between age categories at a particular point in time. (Since most young people survive to be old, equity between 10-year-olds and 70-year-olds reduces in the long run to the dubious assertion that individuals ought to consume goods at a constant rate throughout their life.) The European participants described this life-course perspective as the predominant European outlook, despite the relatively greater proportion of elderly in many European countries.

On the life-course perspective, it is valid to consider intergenerational equity as between the individuals who constitute the baby boom generation and the succeeding generation comprised of their children. Because of its relatively large size, the baby boom generation has already suffered from depressed wages. There are concerns that this generation's eventual needs for pensions and medical care will be too great for the smaller tax base formed by the next generation, and hence that the baby boom generation will be shortchanged in retirement as well--or that its children will bear an inequitable burden. However, Palmer pointed out that, with modest economic growth over the next half-century, these problems need not be severe, assuming that all the adjustment comes on the tax side and that current entitlement programs are not altered. This optimism assumes that the stagnation of the past decade in productivity growth will be overcome. A second caveat is that it is difficult to predict the impact of extended life-spans on the prevalence of morbidity and disability in the population and the associated demand for medical and long-term care resources.

- Poverty rates in the United States are higher than in comparable industrial nations.

The Luxembourg Income Study permits, for the first time, international comparisons of income distribution using consistent definitions of households and income. Preliminary analysis of this data indicates that poverty rates tend to be higher in the United States than in comparable industrial nations, especially among children. The contrast with Canada is particularly striking. Although Canada and the United States have nearly identical median incomes, the United States has twice Canada's poverty rate among children and people of working age, and four times Canada's poverty rate among the elderly.

There was general agreement that child poverty was the central concern of the workshop and that factors other than the age distribution of the population seemed to be responsible for the comparatively poor U.S. standing in child poverty.

RECOMMENDATIONS FOR RESEARCH

- Basic conceptual and descriptive work in the demography of poverty.

Criticisms were directed at the standard methodologies for defining and measuring poverty. Several participants called for more work on equivalence scales (factors used to adjust household income for household size and composition). There was support for a thorough investigation of the conceptual validity of comparing income between groups as disparate as young and old. Indeed, many of the noneconomists present questioned the usefulness of income-based poverty measurements, preferring multidimensional indicators based on consumption and environment. There was support in particular for empirical investigation of intrafamily allocation of goods; income-based poverty measures depend on unverified assumptions about the allocation of income from parents to children. Finally, workshop participants suggested examining contemporary norms concerning dependency as distinct from poverty.

Workshop participants proposed that these new definitions be used in basic descriptive studies in the demography of poverty and dependency, with particular emphasis on understanding the range of variation in economic well-being in the population.

- Causes and consequences of family structure change (including changes in the transition to adulthood).

Much remains to be elucidated concerning the causes of the change in U.S. family structure, despite considerable work on the subject (including some ongoing work at the National Research Council). One important and controversial area in need of assessment is the effect of social welfare policies on fertility. The existence of a substantial but contradictory body of work on this subject makes it a candidate for National Research Council review.

Controversy also exists on the effects of changes in family structure. Bane suggested that, among blacks, single-parent households and child poverty were symptoms of more fundamental socioeconomic problems, including the low employment rate among young black men. Some aspects of this complex situation are being investigated by the National Research Council's Committee on the Status of Black Americans.

- Kinship structure and social support.

Until now, very little has been known about the extent to which kinship relationships beyond the household are translated into social support. With the recent advent of several large-scale surveys that include data on kinship networks and social support, there may be a role for the Committee on Population in sponsoring methodological and conceptual discussion of how to make use of these new resources.

PART II

PAPERS

DEMOGRAPHIC INFLUENCES ON LOCAL PUBLIC EDUCATION EXPENDITURES: A REVIEW OF ECONOMETRIC EVIDENCE

Kenneth M. Chomitz

INTRODUCTION

Does per-beneficiary public expenditure on health care, pensions, and education depend on the relative size of age-based constituencies? Preston (1984) argues that a society with a large proportion of elderly voters and a small proportion of voters with school-age children will tend to allocate public expenditures disproportionately toward health care and pensions and away from education. (We will call this the age-group hypothesis, AGH.) The argument rests on two premises:

- The elderly, their adult children, and voters without school-age children will on average favor somewhat higher per-beneficiary expenditures on health care and pensions and somewhat lower expenditures on education and

- In the long run, public expenditure on a program will tend to reflect the median level preferred by voters (e.g., we rank voters according to the most they would be willing to spend on education. An amount just below that preferred by the median voter would garner a majority vote and be implemented).

The empirical basis for both these premises has been questioned by Binstock (1985). Binstock cites studies showing voting patterns among the elderly do not systematically differ from those of other age groups. Furthermore, he argues that the political mechanisms determining public expenditure are far more complex than premise (2) would suggest.

Even if true, the consequences of AGH might be difficult to detect if Easterlin's bureaucratic inertia hypothesis were also correct (Easterlin, 1980). He theorizes that political systems find it difficult to adjust taxes and expenditures in pace with changes in the size of beneficiary groups. (Presumably it is especially difficult to adjust taxes upward.) Thus, even with an intention to maintain a constant per-pupil expenditure level, actual per-pupil expenditures would be lower in a period of increasing enrollments than during a static period. This dynamic effect will tend temporarily to counteract the AGH equilibrium effect of higher expenditures as a result of a higher student/adult ratio.

These hypotheses are not easy to test empirically. This paper briefly reviews the small number of quantitative studies that relate demographic characteristics of individuals or communities to public expenditure patterns. The studies all concern local school finance and do not focus on demographic effects. All are directed at broad issues in public finance particularly the income and price elasticities of public expenditures and the sensitivity of local expenditures to the size and composition of the property tax base. Nonetheless, demographic variables were included as controls, providing some insight into the political economy of demographic change.

THE ECONOMIC MODEL OF INDIVIDUAL PERFERENCES AND PUBLIC EXPENDITURES

The studies reviewed here have as a common basis an individualistic model of public expenditure determination. In brief, the model assumes that each voter cares about both his or her own consumption of private goods (X) and community consumption of public goods (E, here taken to be per-pupil educational expenditures). Each voter has a preference ordering over combinations of E and X; AGH supposes that voters with children have somewhat stronger preferences for E than their childless neighbors. The model further assumes that E is directly tied to the tax rate, so that higher E implies higher taxes. The incidence of these taxes depends on property holdings or income, so that each individual faces a different tax price: the cost to him of an additional dollar per pupil of public expenditure. It follows that the rational voter can specify what he or she personally considers to be the ideal public per-pupil expenditure E*, given his or her income constraint and prevailing prices. As with most economic goods, the quantity of E* demanded is expected to increase with the individual's income and decrease as the tax price goes up. Thus E* is expressed as a function of income, tax price, and taste-determining variables (including age, education, and number of children).

Of course, any individual has little influence over actual public spending, so that actual expenditure E will differ from a typical voter's ideal E*. There are therefore two strategies for estimating the model. First, we can directly ask individuals to specify their preferred public expenditure level. The respondent's task may be made easier by linking the question to the choices in a recent school tax referendum. Still, the ability or inclination of respondents to accurately specify E* may be questioned. Moreover, in order to link individual preferences to public outcomes, we need in addition to model the individual's decision about whether or not to vote, as well as the political process determining how choices are framed.

An alternative strategy is to model actual community spending levels as a function of community characteristics, including median income and the school-age proportion of total population. A community-level model can be rigorously derived from the model of individual preferences only under very strict assumptions about the nature of preference functions and about voter turnout. However, an atheoretical examination of the correlates of community expenditure may provide useful insights for

constructing political models in which community-level behavior is not a simple function of individual preferences.

Both these models have potential biases. At the individual level, the Beckerian model of the family implies that number of children is not a valid independent variable. Rather, educational expenditures and number of children are codetermined; families that prefer child quantity to "quality" will opt for large family size and low per-child educational expenditure. Unless we can control for tastes, then, the tendency for a positive correlation of children and E* within families will be obscured by a negative correlation across families. (Strictly speaking, the problem should be attacked by jointly modeling the family size and educational expenditure decisions.)

The analogous bias at the community level has been described by Tiebout (1956), who hypothesized that individuals will tend to group themselves in communities with homogenous preferences for public expenditure. (People who prefer low public expenditure will flee high-tax communities and vice versa.) Thus community income and the child/family ratio may not be independent variables; rather, they are jointly determined with the level of public expenditure. If we observe large families in high-expenditure communities, did the families vote for the expenditures, or did the expenditures attract the families? The question is even more complicated if tax assessments affect property valuations.

In light of the advantages and disadvantages of both strategies, it seems reasonable to examine both individual-level and community-level models.

INDIVIDUAL-LEVEL STUDIES

The determinants of public educational expenditure have been explored in three survey-based studies. Rubinfeld (1976) surveyed voters in a Michigan community after they had voted on maintaining a 3.8 mill supplementary educational property tax. He estimates a logit model that predicts each respondent's yes or no vote; the model does not permit derivation of the absolute level of E* preferred. Bergstrom, Rubinfeld, and Shapiro (1982), in a statewide survey of Michigan voters, asked each respondent's satisfaction with his or her community's current level of educational expenditure. Those unhappy with the existing level were asked whether they would prefer a higher or lower level, given that their own tax liability would be adjusted proportionally. This information was sufficient to enable the authors to estimate E* for each respondent, using an ordered logit approach that predicted a "more, less, or the same" response according to whether the predicted E* was more, less, or approximately the same as the respondent's community's expenditure level. Lankford (1985) surveyed voters in Marshall, Michigan, after a referendum election in which they could vote on three independent school tax proposals. This data allows Lankford to estimate a utility function (e.g., a ranking of alternative levels of E), from which a rather complicated demand function for E* is derived.

All three studies faced similar problems of sample selection. First, they could not control for response bias and hypothesized that

people favoring public education were more likely to respond. Second, the sample was restricted to homeowners, because of the authors' particular interest in the effects of tax price. It is extremely difficult to assess the actual or even the perceived incidence of property taxes on renters. Third, none of the studies tackled the difficult question of predicting voter turnout. This remains a knotty problem for economists, since a rational voter would probably decide that his or her influence on public expenditure was insufficiently large to justify the bother of voting.

The results of these studies are shown in Table 1. Note that the magnitudes of the coefficients are not directly comparable across the models. Bergstrom et al. estimate a ln-ln model of expenditure; the coefficients in the Rubinfeld (1976) model are increments in the ln of the odds in favor of voting yes on the school tax proposition; the column devoted to Lankford (1985) reports the predicted level of E* for various levels of a given independent variable, all other variables at the sample mean.

Bergstrom et al. find a strong effect of children on desired per-pupil public expenditure. Having a single preschool child boosts a voter's desired E* by 76 percent; having a child age 6-11 boosts E* by 40 percent. Both coefficients are statistically highly significant. Rubinfeld found that the odds of voting for the tax increase were about four times higher for voters with one to three children than for their childless counterparts; the odds were more than seven times higher for those with four or more children. Lankford's results tell a somewhat different story. Compared to the childless voter, the one-child voter wants to spend 21 percent more; the two-child voter wants to spend 46 percent more; but the voter with three children wants to spend 28 percent less. This may reflect the bias noted earlier--that high fertility may be correlated with low preferences for education.

Rubinfeld and Bergstrom et al. both estimate the effects of age. Rubinfeld finds no significant age effects. Bergstrom et al. find that other things being equal, being over 65 boosts E* by 88 percent. This is somewhat counteracted by a 57 percent reduction among those who were retired or disabled. The implied net effect of both retirement and age over 65 is a reduction of 17 percent.

Significant income and price effects are found by both Rubinfeld and Bergstrom et al. (Lankford does not report a significance level for income). Bergstrom et al. find that E* has an elasticity of .38 with respect to income and -.44 with respect to tax price. To put this in perspective, doubling one's income would have the same predicted effect on E* as adopting a six-year-old child.

Socioeconomic characteristics are also found to affect the demand for public education. Bergstrom et al. find that college graduates desire 50 percent higher levels of E* than otherwise similar nongraduates (the coefficient falls slightly short of significance at the 0.95 level, though). Lankford estimates that white-collar workers want 29 percent higher E* than blue-collar workers. More strikingly, Bergstrom et al. estimate that being Jewish boosts E* by 520 percent and being black boosts E* by 1300 percent! The authors speculate that the latter coefficient is skewed by the restriction of the sample to homeowners,

TABLE 1 Individual-Level Studies

	Bergstrom et al.	Lankford	Rubinfeld
Equation	Model 4	---	p. 33
Sample	All-Michigan, 1978	Marshall, MI, 1979	Troy, MI, 1973
No. of observations	Subset of 2,001 respondents	114	425
Estimation technique	Ordered logit	Maximum likelihood	Logit
Dependent variables	ln expenditure/pupil	Expenditure/pupil	ln odds of approving 3.8 mill tax increase
Independent variables:	Coefficients		
No. of children	# Children 1-5: .567** # Children 6-11: .335** # Children 12-16: .067	0: $1,254 1*: $1,518 2*: $1,833 3+**: $ 908	Children in public school 1: 1.44** 2: 1.39** 3: 1.30** 4: 2.00** 5: 2.16**
Children in non-public school	1+: -.540	---	1+ children: -.56
Age plus retirement status	65+: .633* Retired or disabled: -.823**	---	35-49 .08 50-64 .61 65+ 1.04
School employee	.765**	Not employee: $1,236 Employee**: $1,856	Teacher: 3.07**
Education/occupation	College grad: .407	Blue collar: $1,185 White collar*: $1,530	---
Income	ln income: .381**	5th %ile: $1,080 95th %ile: $1,686	ln income: 2.14**
Tax price	ln price: -.435**	5th %ile: $1,488 95th %ile: $1,061	ln price: -1.21**
Black	2.649**	---	---
Jewish	1.830**	---	---

[a] For Lankford, reported values are not coefficients but level of educational expenditure per pupil associated with given value of independent variable, other variables at sample mean. For Bergstrom et al., the structural coefficient is reported. These were obtained by dividing the estimated coefficients β/σ by the opposite of the coefficient of ln expenditure. Significance levels pertain to the original β/σ estimates.

* Asymptotically significant at 0.95.

**Asymptotically significant at 0.99.

who represent a highly select and probably atypical subset of the black population. Finally, all three studies show that school employees are extremely enthusiastic supporters of local educational expenditure.

COMMUNITY-LEVEL STUDIES

Relevant community-level studies have been performed by Feldstein (1975), Inman (1978), Ladd (1975), and Lovell (1978). All these studies draw their samples from New England communities and regress per-pupil educational expenditure on median community income and other community characteristics. The results of these studies are shown in Table 2. There is broad agreement among these studies, and within the individual studies, concerning the positive income-elasticity and negative tax-price elasticity of educational expenditure. Aggregate per-pupil property value is also positively related to per-pupil expenditure.

The major disparity between the community-level and the individual-level studies concerns the effect of the ratio of children to total population. Among the community-level studies, a significant effect of this ratio is found in only one of Feldstein's eight regressions and in none of the other studies. Feldstein's equation 1.8, which finds that a 10 percent increase in the children/(total population) ratio yields a 4.3 percent increase in expenditures per pupil, is based on instrumental variable estimation. This approach is theoretically preferred, but only if the instruments are correctly specified; and even then sacrifices precision of estimation for theoretical unbiasedness.

Why the disparity between the micro and macro views of the effect of children? One possibility is that Tiebout-type effects are biasing the results. For instance, high per-pupil expenditure communities may enforce restrictive zoning regulations, raising the price of homes and excluding most large families. A second possibility involves Lankford's finding of a curvilinear relation between children per family and desired E*. If this relation holds generally, the aggregate child/adult ratio is much less important than the distribution of voters by family size. Finally, the individual-level studies may have neglected to control for the effect of the aggregate child/adult ratio on the individual's demand for E*. That is, I may--from self-interest--prefer higher E* as my own family gets larger, but--as a fiscally conservative citizen--favor reductions in per-pupil expenditure to compensate for increases in enrollment. By aggregating children per family to the community level, these two effects could cancel out, but they are potentially distinguishable with microdata.

Feldstein uses lagged expenditure and enrollment data to test Easterlin's bureaucratic inertia hypothesis. All eight of his equations find strong support for the hypothesis: a 10 percent increase in the child/(total population) ratio over the previous five years is associated with a current 3 percent decrease in per-pupil expenditure.

Only Inman examines the effect of proportion elderly on E*. He finds a slight negative effect: an increase in the elderly share of population from 10 percent to 11 percent would reduce per-pupil

TABLE 2 Community-Level Studies (dependent variable: educational expenditures/pupil)

	Feldstein		Inman	Ladd	Lovell
Equation	1.1	1.8	3 TSLS	1	Table 2, #2
Sample	Massachusetts towns, 1970		Long Island school districts, 1968-69	Boston SMSA communities, 1970	Connecticut towns, 1970
No. of observations	105	105	58	78	136
Equation form	ln-ln	ln-ln	ln-ln	ln-ln	ln-linear
Methodology	OLS	IV	2 SLS	OLS	OLS
R^2	0.643	0.510	N/A	0.65	0.722
Independent variables:	Coefficients				
Public school pupils/ total population	0.208	0.429*	---	-0.027	---
Public school pupils/ total families	---	---	---	---	-0.059
Private school pupils/ total population	-1.112**	-1.479	---	-0.018	---
Current enrollment/ enrollment - 5 years	-0.336**	-0.285**	---	---	---
Elderly household heads/ total households	---	---	-2.210**	---	---
Property value/pupil	0.283**	0.361**	---	0.239** (residential)	0.095*
Housing value/ property value	---	---	---	-0.309**	---
Owner-occupied/ total housing	-0.118**	-0.145**	---	---	---
Renters/total housing	---	---	-0.016	---	---
Median family income	0.475**	0.465**	0.760**	0.459**	0.300**
Median/mean income	---	---	---	---	-0.666**
Tax price	-1.000**	-1.599**	-0.457**	-0.485*	---
State block grants	0.066**	0.127**	0.287	0.301*	---
Federal block grants	0.136**	0.124**	---	---	---
Median school years, adult	---	---	---	---	0.960**
Professionals/all employees	---	---	---	0.102	---
Proportion poor	---	---	.41 ln (Participation rate)	0.078*	-0.451

* Significant at 0.95.

** Significant at 0.99.

spending by about 2 percent. Inman's model differs from the others in including the voter participation rate, but excluding the children's share of population.

CONCLUSIONS

These studies represent a rather fragile base for predicting the future influence of demographic change on the political process. They focus on small, atypical segments of the country, and they deal with local, referenda-based decisions rather than national, legislative action. Nonetheless, they apparently represent the best available quantitative data relating demographic characteristics to age-based public expenditures. Moreover, local school finance is of intrinsic interest, as it involves major expenditures; the $55 billion spend on local public schools in 1982, for instance, exceeded the cost of Medicare for that year.

A number of conclusions can be drawn from the studies:

- There is no significant pure age (or cohort) effect on voters' preferred per-pupil educational expenditure;
- Wealthier, higher-income, and more educated electorates support higher levels of per-capita educational expenditure;
- There is mixed evidence of a positive relation between the child/adult ratio and per-pupil educational expenditure;
- There is limited evidence that per-capita expenditures will temporarily lag behind a growing student enrollment.

If the issue is to be pursued, first priority should attach to reconciling the community-level and individual-level results on the effect of relative number of children. It would not be difficult to rerun the individual-level studies introducing the community ratio of children to adults as an explanatory variable. Somewhat more difficult, but worthwhile, would be a two-equation model of fertility and voting behavior. Similarly, the community-level studies could be rerun with more attention to the endogeneity of the child/adult ratio, median income, and property values.

Another useful exercise would be to use the parameters of an individual-level study to project, via microsimulation, the distribution of E* among a hypothetical population 20 or 30 years hence. The new distribution of E* would reflect a decrease in the child/adult ratio, a general increase in real income, and probably a small increase in the college-educated percentage of adults. The second two changes would tend to shift the entire distribution curve to the right, while the first might mainly squash the righthand tail leftward.

Finally, it would be interesting to try to model congressional votes on age-categorical programs as a function of districts' demographic and socioeconomic characteristics. This would, however, be a difficult undertaking.

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THE CHANGING ECONOMIC STATUS OF THE YOUNG AND THE OLD

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INTRODUCTION AND SUMMARY

In his presidential address to the Population Association of America, Preston (1984a, 1984b) points out some dramatic contrasts between trends in the well-being of children and of the elderly over the past 20 years. Poverty rates have fallen sharply for the elderly but not for children. Transfer programs benefiting the elderly have mushroomed, while those directed at children have languished. Various indicators of mental and physical health show substantial improvement for the elderly, yet not for the young. Preston identifies a number of demographic changes, including a massive shift in the age distribution and increasing instability among families, as the major explanatory factors. Overall, the picture shows a large-scale redistribution of societal resources and a shift in well-being away from the young and toward the old and indicates that the demographic changes underlying these disturbing trends are likely to continue.

The purpose of this paper is to take a closer and somewhat novel look at economic changes that have occurred since the late 1960s using data from the University of Michigan's Panel Study of Income Dynamics. The PSID data are used to provide comparable information on trends in the longer-run family economic status of individuals of various ages and to examine the role of cohort, age, and family instability in producing these trends. There are several advantages to using the PSID for our purposes. First, while there have been a number of quite comprehensive assessments of recent trends in the economic status of the elderly and children, it is surprisingly difficult to find published information, other than poverty and simple family income distribution data, that allows for precise comparison of the two groups. Second, most simple descriptions of the economic status of the young and the old have been based on cross-sectional data, usually from the Current

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Population Survey, showing the comparative status of individuals based on single-year income information. Panel data can provide a longer-run picture of the status of the population. This is an important benefit given the remarkable amount of economic mobility that has been observed in the population with the PSID data (Duncan et al., 1984b) and the related danger of misclassifying the more permanent economic position of individuals by relying on single-year information. Multiyear average information also averages out macroeconomic fluctations that can distort comparisons of individual years. Furthermore, we use the PSID data to show short-run trends in status and the stability of economic position. Average level, trend, and stability are three independent, important components of economic well-being.

The approach and basic findings of the analysis can be summarized as follows: our examination of the economic position of the young and the old breaks up the 1968-1982 panel period into three five-year intervals. Several aspects of the income distribution are examined within these intervals: the average position of each group, the fractions of each with five-year family incomes falling below the poverty line, the fractions "affluent" (defined as five-year family incomes at least five times higher than the official poverty line), and the fractions "extremely poor" (five-year family incomes less than 80 percent of the poverty line).

- We find remarkable improvement in the comparative economic position of the old relative to the very young. Using the preferred measure of family economic status--five-year family income adjusted for family size--we find that the elderly began the panel period with sustantially lower average levels of well-being than children and ended the period with substantially higher levels. Rates of affluence were initially higher for children but had reversed by the end of the period; rates of extreme poverty were initially higher for the elderly but these also had reversed by the end.

More remarkable than the differences between the elderly and children were differences between these two groups and the rest of the population, whose economic status by all measures and at all times was substantially higher. However, the "true" gap between the elderly and the rest of the population may be overstated with the cash income measures available to us (Smeeding, 1985). To the extent that these gaps would persist with the proper adjustments to cash incomes, concern with redistribution between the young and the old is misguided because it begs the more important question of income redistribution toward both of these groups from the rest of the population.

A look at the stability of family incomes within the three five-year periods reveals a substantial <u>increase</u> in the stability of the economic well-being of the elderly but modest <u>decreases</u> in the stability of children's economic well-being. Thus not only has the average economic position of the elderly surpassed that of the young, but the gap in the stability of that position has also increasingly favored the elderly.

We examine the role of transfer incomes--both contributory (e.g., social security) and noncontributory (e.g., Aid to Families With Dependent Children)--in raising family incomes and reducing poverty.

- Here we find, as others have before us, that social security and other contributory transfer income programs have had a very favorable impact on the economic status of the elderly. The more purely redistributive noncontributory programs such as AFDC and Supplemental Security Income have had modest and comparable effects on the economic status of the elderly and children. These effects were smaller in the early 1980 than in the middle 1970s.

To examine whether the apparent improvement in the economic status of the elderly is due to genuine improvement in the situations of elderly people as they age or, instead, to new cohorts who enter old age in improved economic situations relative to earlier cohorts, we follow a number of five-year age cohorts over the three five-year periods.

- Here the evidence is particularly striking: both of the five-year age cohorts of elderly we tracked with the PSID data experienced a substantial drop in economic status with the passage of time. The only reason that the elderly as a group appear to improve their economic position over time is because new cohorts enter old age in a considerably better financial position than previous cohorts.

Our analysis of the comparative economic status of children is conducted separately by race and focuses on the issue of the extent to which differences in family composition account for racial differences in the economic status of children and the increased family instability of black and white families accounts for the trends in the economic status of children in general.

- In line with previous findings, we find dramatic differences in the economic status of black and white children. The greater incidence of female-headed families among blacks accounts for less than one-third of these racial differences. Increases over time in the instability of both black and white families explain little of the decline in the economic status of children relative to other groups in the population.

Also in contrast to the picture painted by the cross-sectional data, the two cohorts of children experienced substantial improvement in their economic status with the passage of time.

Our analysis of the elderly is conducted separately by sex and examines the extent to which the higher economic status of elderly men is a function of their living arrangements.

- At least two-thirds of the differences in the economic status between elderly men and women can be accounted for by differences in their probabilities of living in husband-wife families.

AN OVERVIEW OF TRENDS IN ECONOMIC STATUS

Aggregate Economic and Demographic Conditions

Before presenting the detailed PSID results, it is useful to examine the very different macroeconomic conditions and demographic trends that characterized different portions of the period from 1968 to 1982. The first five years (1968-1972) predate the energy price explosion and were characterized by low inflation and unemployment (Table 1, left panel). Both inflation and unemployment rates were substantially higher during the second five years (1973-1977), a period that includes the sharp recession of 1974-1975, and higher still during the the final five years (1978-1982), which witnessed the beginning of the even more severe recession of the early 1980s. Inflation rates did drop substantially during 1981 and 1982, but not sufficiently to bring the five-year average inflation rate of this third period below its level for either of the other periods.

Despite the increasingly dismal macroeconomic environment, the size of the income pie that was distributed to the population, adjusted for growth in the population and for inflation, rose modestly during the 15-year period (Table 1, middle panel). Real per-capita personal income averaged about $10,000 in the first five years, $11,200 in the second and $12,400 in the third.[1]

A final important economic trend that characterizes this 15-year period is the dramatic growth in the extent of redistribution of income through government transfer programs (Table 1, right panel; note scale differences between the middle and right panels).[2] Real cash transfers per person, most notably social security benefits, increased by half; in-kind transfers, most notably Medicare, more than doubled over the period. Despite their growth, in-kind transfers per person were only about one-quarter as large as cash transfers in the final period. The PSID data contain measures of cash but not in-kind transfers.

The age distribution of the population also underwent considerable change during this period. Census Bureau data show declining fertility rates for all but the most recent portion of the period, leading to decreases in both the number of children (Table 2, left panel) and the fraction of children in the population (Table 2, right panel). Decreasing mortality rates among the elderly accompanied the decreasing fertility rates, increasing the size and proportion of the elderly population. The number of elderly women in the population has grown considerably faster than the number of elderly men.

Procedure

The approach we take with the PSID data is to divide the period over which the information has been collected into three five-year periods: 1968-1972, 1973-1977 and 1978-1982. Within each period, we select individuals of all ages who were alive during the entire five years and categorize them by age.[3] In most of our analyses, we divide the population into three age groups--age 0-9 in the first of the five

Table 1: Average Macroeconomic Conditions During the Five Year Periods

5 Yr Average Annual Unemployment Rate and Inflation Rate

(U) Unempl Rate %	(I) Inflat Rate %
4.7	4.6
6.7	7.7
7.3	9.0

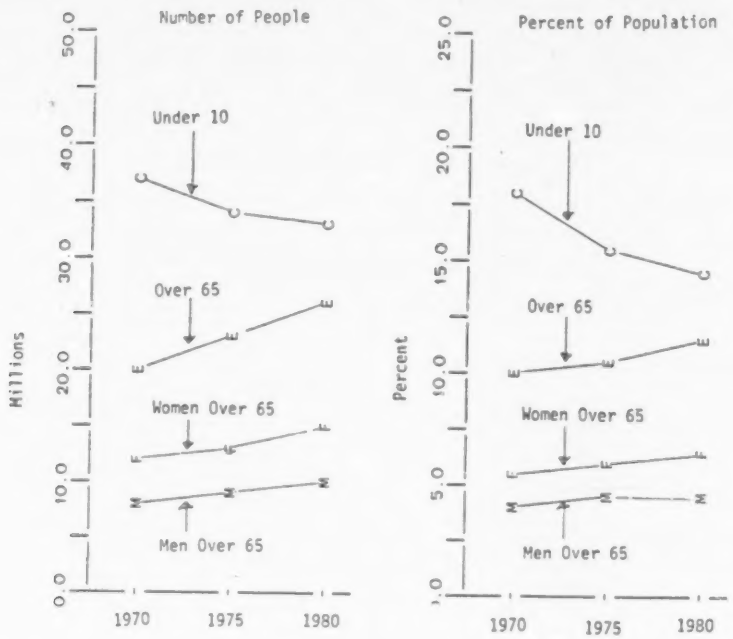
5 Yr Average Per Capita Personal Income in Thousands of 1982 $

(P) Person Income
10.0
11.2
12.4

5 Yr Per Capita Cash and Inkind Transfer Income in 1982 $

(C) Cash Transf	(I) Inkind Transf
768	183
1081	297
1190	399

Table 2: Number and Percent of Children and Elderly in the Population



Number of Children and Elderly in the Population (in Millions)

	(C) Child (<10)	(E) All Elder	(M) Elder Men	(F) Elder Women
	37.1	20.1	8.4	11.7
	33.7	22.7	9.3	13.4
	33.0	25.7	10.4	15.3

Percent of Children and Elderly in the Population

	(C) Child (<10)	(E) All Elder	(M) Elder Men	(F) Elder Women
	18.1	9.8	4.1	5.7
	15.6	10.5	4.3	6.2
	14.5	11.3	4.6	6.7

Source: U.S. Department of Commerce, Bureau of the Census, "Preliminary Estimates of the Population of the United States by Age, Sex, and Race: 1970-1981", Current Population Reports, Series P-25, No. 917, July 1982, Tables 1.

years, age 10-64, and age 65 and over.[4] Individuals in the youngest age group are called "the young" or "children," although not all the individuals in this groups are children of the individuals who head the family in which they live. Although we use individuals of all ages as our units of analysis, we measure economic status on the basis of the total cash incomes of the families in which the individuals resided during the given five-year period. The PSID concept of the "family" is similar to the Census Bureau definition of a "household" in that it includes cohabiting couples who are not married, although it does not include roomers, employees, or other individuals whose relationship to other household members is purely economic. Unrelated individuals in the PSID are considered to be single-person families. All income figures have been inflated to 1982 price levels.

Family Income

The simplest measure of the economic status of the various age segments of the population is total family cash income. When the family incomes of the sample individuals are inflated to 1982 price levels, averaged over each of the five-year intervals and then categorized by the age of the individual in the first year of the five-year interval, the patterns obtained are those depicted in the left panel of Table 3. (The numbers on which the graphs are based are shown below each graph; unweighted case counts for each group are shown in the lower right-hand corner of Table 3.) The persistently lower economic position of the elderly is striking: average family income of elderly individuals was less than half as large as the family incomes of the nonelderly in the 1968-1972 period and rose only a little faster than that of the nonelderly. The family incomes of the young (age 0-9 in the first of the five years) were much higher than those of the elderly during the entire period, although they clearly lost ground during the three periods relative to the other cohorts.

Family Income-to-Needs Ratios

There are many reasons why total family cash income is less than ideal as a measure of family economic status (Moon and Smolensky, 1977). Among the most important are the dramatic differences among families in the number and ages of family members who share a given income.[5] Family size adjustments can be made by dividing family income by the federal government's annually calculated poverty thresholds for families with different compositions based on the number, sex, and age of family members.[6] The resulting average family income-to-needs ratios of sample members in the various age ranges over the three periods are shown in the middle panel of Table 3, and result in patterns that are strikingly different from those based on family income alone.

- When adjusted for family size, the economic status of the elderly was substantially below that of the young during the 1968-1972 period, but had risen above it by the 1978-1982 period.

Table 3: Average Total Family Income and Family Income/Needs

5 Yr Average Total Family Income in Thousands of 1982 $

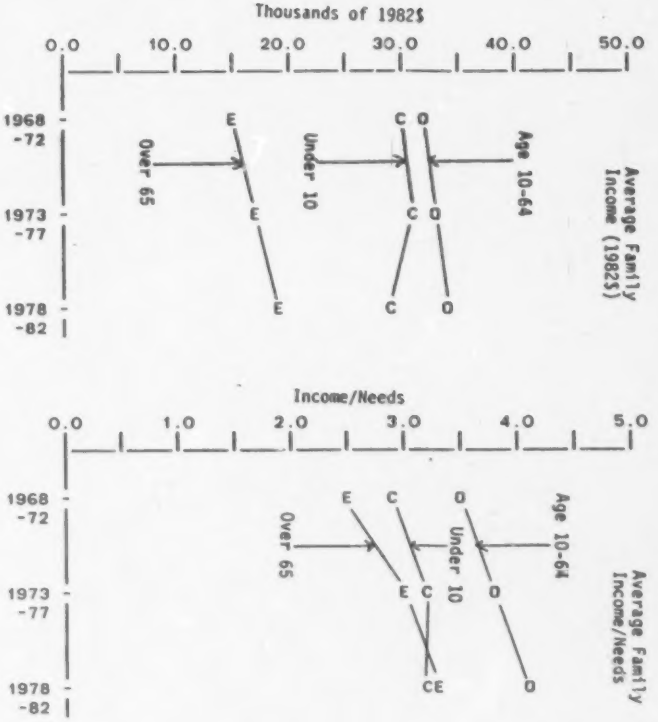
(C) Child (<10)	(E) Elder (65+)	(O) Other 10-64
29.8	14.8	31.5
30.6	17.0	33.3
29.1	18.7	33.6

5 Yr Ave Total Family Income/Needs

(C) Child (<10)	(E) Elder (65+)	(O) Other 10-64
2.9	2.5	3.5
3.2	3.0	3.8
3.2	3.3	4.1

Unweighted Numbers of Observations

(C) Child (<10)	(E) Elder (65+)	(O) Other 10-64
3664	608	10363
2872	673	10494
3041	844	10223



The income-to-needs ratio rose substantially for the elderly, from 2.5 in the 1968-1972 period, to 3.0 and 3.3 in the second and third periods. Corresponding changes for the other groups, particularly the young, were much less marked:

- In contrast to the other groups, the real economic status of the young rose very little over the period as a whole and not at all between the mid- and late 1970s.

The inclusion of information about the population in the middle age range reveals perhaps the most striking finding of all:

- Although the average economic position of the elderly eclipsed that of the young, both groups had strikingly lower average economic positions than the rest of the population.

This finding, especially with regard to the comparative status of the elderly and the middle-aged group, needs to be qualified by the measurement issues raised above. However, to the extent that differences remain after these measurement considerations are taken into account, it appears that the question of resource allocation between the elderly and the young is based on a false dichotomy. Resources are distributed and redistributed among these two groups plus the much larger group of adults in the prime age range. On average, the family economic status of this third group is much higher than that of either of the other groups and has risen almost as rapidly as the position of the elderly.

Poverty and Affluence

The average income and income-to-needs positions depicted in Table 3 shed light on only one of several aspects of the income distribution. Also of interest are trends in the concentrations of individuals in the various age groups at the lower and upper ends of the income distribution. To examine these trends, we focus exclusively on the income-to-needs measure of economic status and show the fractions of the population with five-year total family incomes (a) below the official poverty line ("Poverty," Table 4, left panel), (b) below 80 percent of the official poverty line ("Extreme Poverty," Table 4, middle panel), and (c) more than five times as high as the official poverty line ("Affluence," Table 4, right panel).[7]

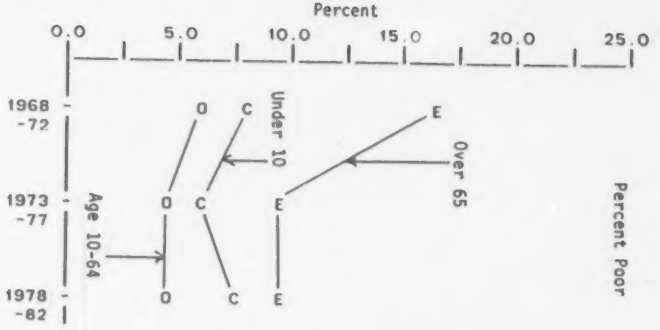
In general, trends at the extremes of the income-to-needs distribution are no different from trends in the averages shown in Table 3:

- Substantially smaller fractions of the elderly were at the bottom rungs of the income distribution in the early 1980s than in the late 1960s, and substantially higher fractions were affluent. Poverty rates of children showed no corresponding improvement and, in the case of extreme poverty, had climbed higher than the rates among the elderly by the 1980s.

Table 4: Poverty, Affluence and Extreme Poverty

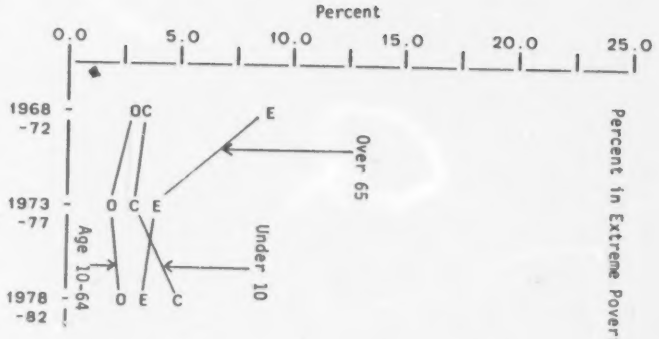
Percent Poor (5 Yr Total Fam Inc < Needs)

(C) Child (<10)	(E) Elder (65+)	(O) Other 10-64
7.8	16.5	5.8
6.2	9.3	4.5
7.6	9.7	4.3



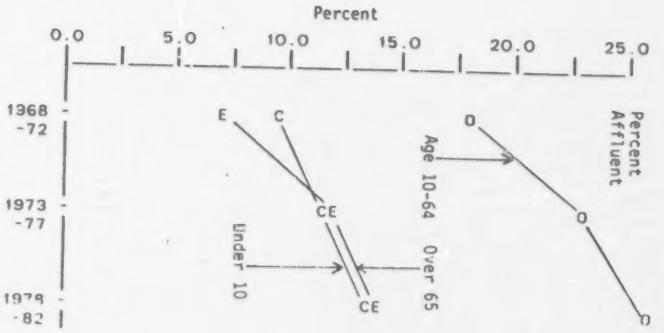
Percent in Extreme Poverty (5 Yr Tot Fam Inc < 80% of Poverty Line)

(C) Child (<10)	(E) Elder (65+)	(O) Other 10-64
3.5	9.0	2.9
2.9	3.9	2.2
5.1	3.7	2.5



Percent Affluent (5 Yr Tot Fam Inc > 500% of Poverty Line)

(C) Child (<10)	(E) Elder (65+)	(O) Other 10-64
9.7	7.1	18.0
11.5	11.9	23.0
13.4	14.2	26.4



Trends in the single-year poverty rates of children and the elderly shown in Current Population Survey data are well-known and parallel those shown in the left panel of Table 4.8 Poverty rates using the official poverty standard (Table 4, left panel) show a dramatic drop in the number of elderly poor between the first two five-year periods and a slight rise between the second and third period. Adjustments for in-kind transfer benefits would undoubtedly show even greater improvement. Poverty rates for children fell somewhat during the mid-1970s and then rose to a point close to their late 1960s levels by the end of the 1970s. These trends are accentuated for rates of extreme poverty, which fell even more dramatically for the elderly and rose significantly for the very young. By the end of the 1970s, rates of extreme poverty were 50 percent higher for the very young than the elderly and twice as high for the very young as for individuals in the middle age range.

All groups in the population increased their representation among the affluent, a status defined here as having a five-year family income that was at least five times as high as the poverty standard. The rate of increase was somewhat faster for the elderly than for children, and a higher proportion of the elderly than of children were affluent at the end of the period. But as with the average income-to-needs figures presented earlier, what is truly remarkable about the trends at the upper end of the income distribution is not the relative position of the very young and old, but rather the size of the gap between both of the these groups and the rest of the population.

- More than one-quarter of the individuals age 10-64 were affluent in the final period, and this rate was twice as high as the comparable rates for the elderly and children.

The Role of Transfers in Raising Income-to-Needs Ratios

Various government transfer programs directed at the elderly and children were created or expanded substantially during the late 1960s and 1970s. In this section we take a look at their contribution to enhancing the average economic position and reducing poverty among the young, the old, and the middle-aged. We divide transfer programs conceptually into two areas: contributory, such as social security and unemployment insurance, for which the individual or the employer makes contributions, and noncontributory, such as Aid to Families with Dependent Children (AFDC) or Supplemental Security Income (SSI), for which no such contribution is made.[9] Unfortunately, the PSID data do not include measures of receipt of in-kind benefits other than food stamps, and therefore our analysis is restricted to cash transfer programs.

The distinction between contributory and noncontributory transfers is an important one in assessing the intergenerational equity of the trends in transfer payments during this period. Despite rhetoric to the contrary, contributory programs such as the retirement provisions of social security are best considered as pension programs, with the crucial question being whether each generation of beneficiaries can expect retirement benefits to reflect a fair (market) rate of return

on contributions prior to retirement. Transitory imbalances between the tax payments of current workers and retirement benefits due to demographic changes do not bear on this question. Benefit levels of noncontributory programs are rather more a function of society's current evaluation of how much redistribution is necessary to achieve its goals (e.g., equality of opportunity, provision of a safety net) and how important those goals are with respect to competing uses of that money.

Table 5 shows three different average family income-to-needs figures for the various age groups: (a) with no transfer income included in the family income (labeled "Income Without Transfers"), (b) additional income received from contributory transfer programs (labeled "Social Security + UI"), and (c) additional income received from noncontributory programs (labeled "Welfare"). These three income components are shown for children in the left panel of Table 5, for the elderly in the middle panel, and for the rest of the population in the right panel. Taken together, they show that:

- Income from transfer programs contributed little to the average economic status of the young in each of the three five-year periods, while social security played an important and growing role in the income of the elderly.

Since welfare programs are targeted at the lower end of the income distribution while social security benefits are mostly a function of past contributions, this differential in the effect of transfer programs on the average income-to-needs position of the population is not surprising. Effects of these programs in reducing poverty rates and in affecting the position of certain population subgroups, such as black children, are presented below.

Also of interest in the figures presented in Table 5 are the trends in the underlying nontransfer incomes. The average nontransfer incomes of children increased across the three periods, but the increase was considerably less than those of the elderly.

The Role of Transfers in Reducing Poverty

Table 6 shows for poverty rates what Table 5 showed for the average income-to-needs ratios. The top lines of each panel are rates of so-called latent poverty--fractions of the population that would be poor if no transfer income were received and there were no offsetting change in the nontransfer income. These rates fell significantly for children and individuals in the middle age range during the panel period but, surprisingly, rose for the elderly. Thus:

- Although growth in private pensions and other nontransfer sources improved the average income-to-needs position of the elderly, more elderly were dependent on transfer income sources to keep them out of poverty in the early 1980s than in the late 1960s.

Table 5: Role of Transfer in Raising Income/Needs

Role of Transfers in Raising Income/Needs: Children (Age <10 in 1st Year of Period)

	(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
1968-72	2.8	2.8	2.9
1973-77	3.0	3.1	3.2
1978-82	3.1	3.1	3.2

Role of Transfers in Raising Income/Needs: Elderly (Age 65 or Older in 1st Year of Period)

	(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
1968-72	1.8	2.5	2.5
1973-77	2.0	2.9	3.0
1978-82	2.3	3.3	3.3

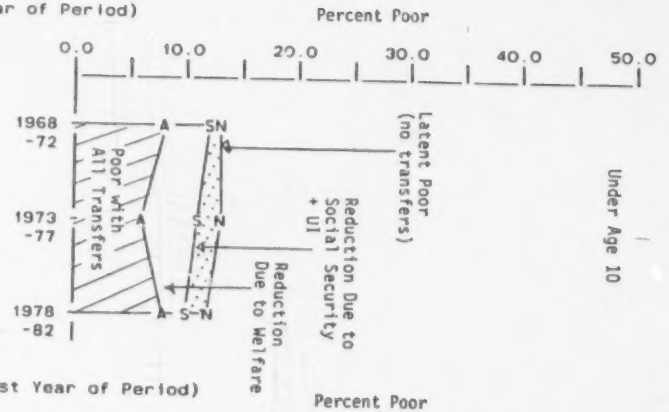
Role of Transfers in Raising Income/Needs: All Other (Age 10-64 in 1st Year of Period)

	(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
1968-72	3.4	3.5	3.5
1973-77	3.7	3.8	3.8
1978-82	3.9	4.1	4.1

Table 6: Role of Transfers in Reducing Poverty

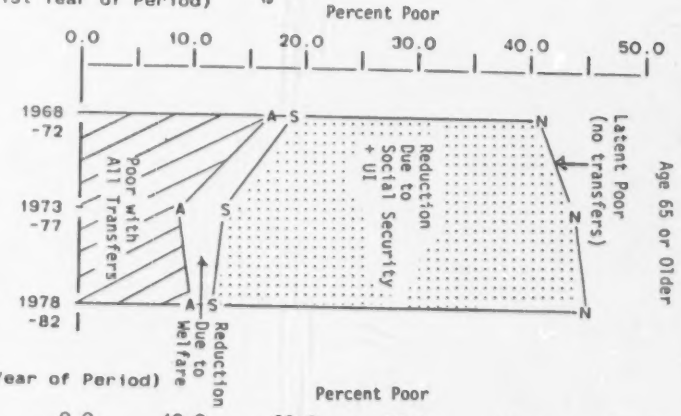
Role of Transfers in Reducing Poverty: Children (Age <10 in 1st Year of Period)

(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
13.0	11.7	7.8
12.7	10.8	6.2
11.6	10.3	7.6



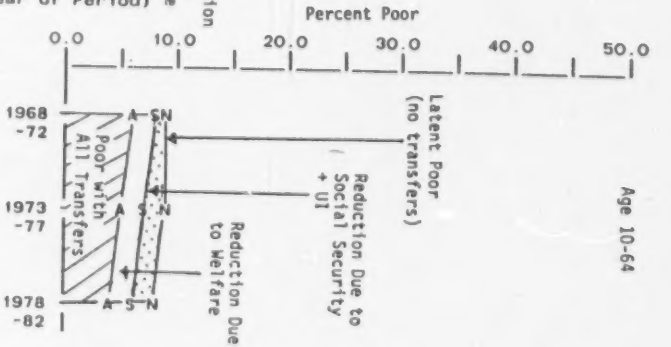
Role of Transfers in Reducing Poverty: Elderly (Age 65 or Older in 1st Year of Period)

(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
40.8	18.8	16.5
43.8	12.5	9.3
45.2	11.8	9.7



Role of Transfers in Reducing Poverty: All Other (Age 10-64 in 1st Year of Period)

(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
9.4	7.6	5.8
9.2	6.8	4.5
8.2	5.8	4.3



The increasing rates of latent poverty among the elderly appear inconsistent with the increasing average pretransfer income-to-needs ratio for the elderly shown in Table 5. The two trends are not necessarily inconsistent, however, and indicate that the distribution of pretransfer incomes among the elderly have become considerably less equal during the period.

Not surprisingly, contributory transfers had a modest effect on the poverty rates of children, reducing them by between 1 and 2 percentage points. In the first two periods, noncontributory transfer payments had twice as much of an impact on childhood poverty as contributory transfers (i.e., a 4 versus 2 percentage point reduction), but by the last five-year period the cutbacks in welfare programs had reduced by nearly half these programs' effectiveness in lowering the incidence of poverty among children.

The role of cash transfers in reducing poverty among the elderly is, of course, quite different. Social security benefits played an increasingly dominant role here, reducing the poverty rates of the elderly by 22 percentage points in the 1968-1972 period and by 33 percentage points during the 1978-1982 period. Noncontributory transfer sources, such as the Supplemental Security Income program instituted in the mid-1970s, played a relatively modest role, reducing the poverty rates of the elderly by between 2 and 3 percentage points.

- Looking only at noncontributory cash transfer programs, we find quite similar trends for the elderly and children. The overall average status of each group was not affected by them very much at any time. These programs brought similar proportions of the two groups out of poverty during the period, and both groups were helped more in the middle of the 1970s than in the beginning of the 1980s.

Income Instability and Short-run Trends

Thus far, we have used the five-year accounting periods only to provide a longer-run view of the <u>average</u> economic position of the young and old. But they can also be used to explore other dimensions of economic status, most notably the <u>stability</u> of family incomes. Everything else being equal, most people would prefer a stable income to an unstable one and therefore, in a real sense, a family with the same average level of economic well-being as another but with less stability is worse off.

There are many ways of calculating instability; one of the most straightforward is the average amount of year-to-year change. Using income-to-needs as the measure of economic status, we computed an average year-to-year percentage change in income-to-needs ratios within each of the five-year periods.[10] The average amounts of instability for the young, the old, and the middle-aged are shown in the left panel of Table 7.

- Family economic status has become somewhat <u>less</u> stable for children but substantially <u>more</u> stable for the elderly. Thus, by the

Table 7: Instability and Trends in Income/Needs Within the Five Year Periods

Income/Needs Instability (Ave Yr-to-Yr % Change in Inc/Needs)

	(C) Child (<10)	(E) Elder (65+)	(O) Other 10-64
1968-72	10.4	9.8	11.2
1973-77	11.0	10.0	11.5
1978-82	11.3	8.6	11.7

Percent with Fam Inc/Needs Rising Faster than Inflation

	(C) Child (<10)	(E) Elder (65+)	(O) Other 10-64
1968-72	56.4	52.3	60.9
1973-77	49.4	41.3	57.3
1978-82	35.0	40.0	43.8

beginning of the 1980s, the average economic position of the elderly had not only surpassed that of children, but it had also become considerably more stable.

Whether this increased stability came about because the indexing of social security benefits stabilized the real value of this important income source or whether there were some other income sources that dampened the fluctuations are interesting questions worthy of further study. It is clear that the turbulent macroeconomic conditions of the 1978-1982 period increased the instability of the economic position of both the young and individuals in the middle age range, but not of the elderly.

A final dimension of economic status that we explored was the trend in real income-to-needs ratios over each of the five-year periods. Here the measure was quite simple--a dichotomous indicator of whether a family's income-to-needs ratio rose more rapidly or slowly than inflation during the period.[11] The middle panel of Table 7 shows the fractions of the various groups that kept up with inflation within each of the five-year periods.

For most of the families, the combination of high inflation and unemployment made it increasingly difficult to keep pace with inflation. A majority within each of the age groups were able to hold their own during the 1968-1972 period, but the comparable fractions for the 1978-1982 period were all below 50 percent. Here again, the situation for children deteriorated faster than that of the elderly, and by the end of the period, fewer children than elderly had kept pace with inflation.

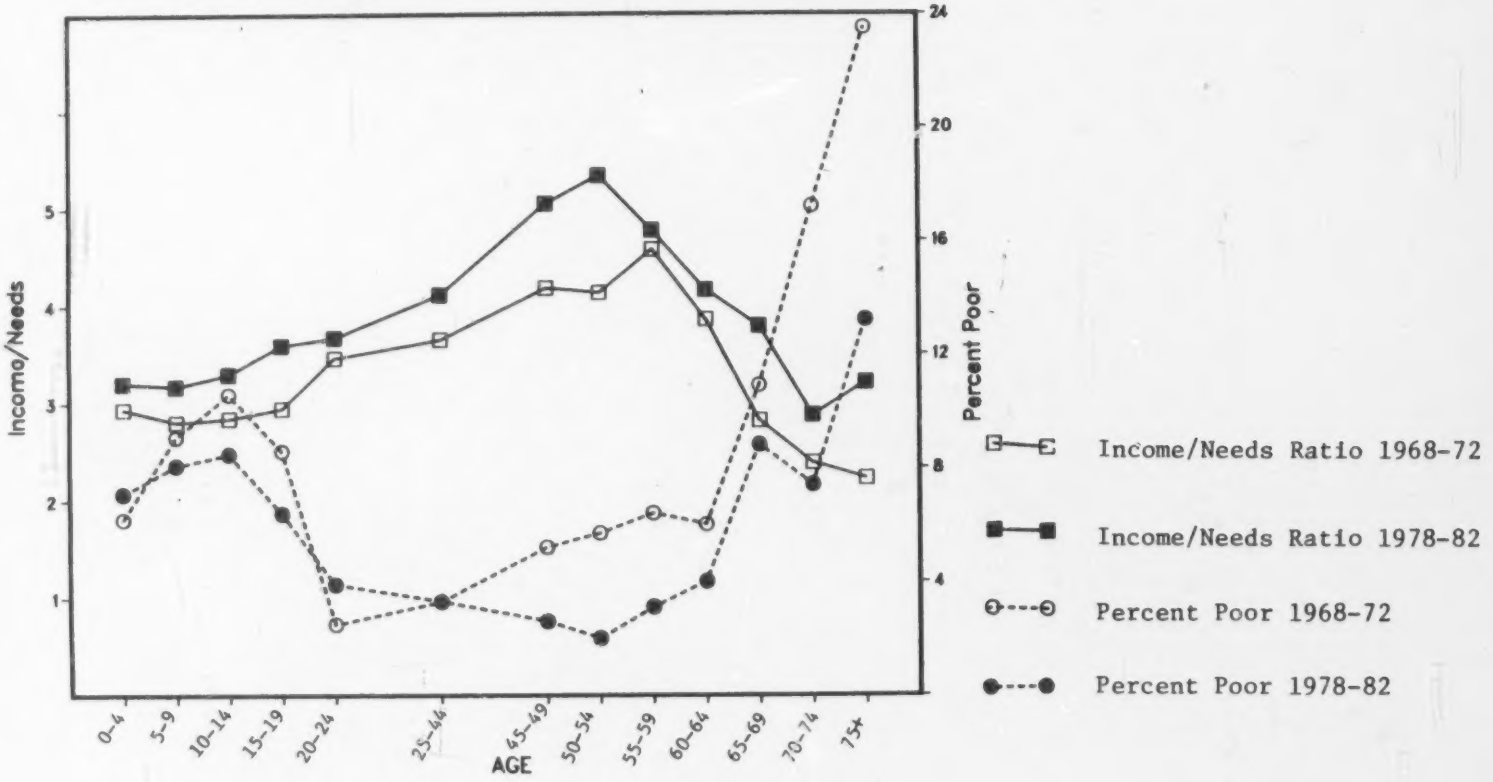
AGE, PERIOD, AND COHORT DIFFERENCES IN ECONOMIC STATUS

In the previous section we focused attention on the economic status of groups at the the ends of the life cycle: young children and the elderly. We examined differences between these two age groups and between them and those in the broadly defined intermediate age range. In this section we begin by providing a more complete description of the relative economic status of persons across the complete life cycle. With this as a framework, we will go on to consider alternative explanations for the observed pattern.

Figure 1 is based on data from the PSID. Persons were classified into the age brackets shown on the horizontal axis according to their age at the beginning of each of two five-year periods (1968-1972 and 1978-1982), and the economic status of the household of each person was calculated across that five-year period, as in the previous section. Two measures of economic status are shown: the five-year income-to-needs ratio and the percentage of persons with five-year household incomes less than the minimal needs standard for that household.

Figure 1 shows that children in the 0-14 year age range have fairly constant levels of income-to-needs ratios, and that the economic status of older age groups gradually increases up to about age 60;12 there is a sharp decline in the average income-to-needs ratio for those in each older age level. The age pattern observed in Figure 1 is readily

Figure 1: Cross-Sectional Pattern of Age Differences in Average Income/Needs Ratio and Percent Poor



interpretable in terms of life-cycle factors such as the career stage of working persons, the departure of children from the parental home, and retirement from the labor force. Comparison of the lines for the two sets of observation years shows that the average economic status improved for persons of all ages. The change for older persons (age 65 and older) was greater than for persons of other ages, and in particular greater than for children, but the trend for children has also been positive, not negative.

Since the income-to-needs ratio is based on mean income and needs standards, it is not very sensitive to variation at the tails of the distribution, and in particular to the proportion with low incomes. The second measure of economic status shown in Figure 1, the percentage poor, shows much larger differences among the different age levels of children, especially in the earlier period when the proportion of children in poor households increased sharply from birth to the 10-14 year range. This presumably reflects a combination of factors, including the proportion of mothers in the labor force, the average number of children in the households, and the needs standards for those children (i.e., the denominator of the income-to-needs ratio). The proportion of older age groups in poverty drops off considerably and remains at a fairly constant level for those in the age range from 20 through about 50, then gradually increases up to the early 60s, and increases sharply for each older age group. Comparison of the curves for the two five-year periods shows that there has been a general decline in the percentage of poor people at most, but not all, age levels. The decline was sharpest for the elderly, while for the youngest children and for adults in the age range from 20 to 44 there has been no decline at all--indeed, perhaps even a slight increase in poverty.

The most common interpretation of statistics such as those shown in Figure 1 and in Tables 3 through 7 is to attribute the differences and trends to a combination of age and period effects. That is, differences between persons in different age groups are generally interpreted as consequences of their age, and the trends across time within each group are generally interpreted as consequences of conditions that changed across the years during which the data were collected. This, however, is not the only possible interpretation. Confounded with age and period is another variable that may be equally relevant to the observed patterns: the year of birth. Those who are elderly at a given time differ from those who are children and from those in the middle years at that time not only with respect to their age, but also with respect to when they were born and thus the environment they encountered at each age. To the extent that their respective birth cohorts differ on economically relevant variables, the observed differences between the elderly and children might better be explained in terms of their cohort membership than in terms of their current ages. Similarly, the economic conditions of those who are elderly in year t may differ from those who are elderly in year t' not only because of differences in conditions that exist at those two specific times, but also because of differences in conditions that prevailed at earlier times--say, when they were children, or during their work careers. In particular, later cohorts--for example those who retired in the late 1970s

and early 1980s--have (on the average) greater accumulated assets and pension rights than did the earlier cohorts whom they replaced in the ranks of the elderly.

Despite valiant attempts to do so, it is impossible to separate the linear effects of age, period, and cohort by any purely statistical technique (Rodgers, 1982).[13] One solution to the dilemma is to specify the theoretically relevant variables that explain the observed relationships with age, period, and cohort and to estimate a model that includes those variables rather than the crude indicators. It is this type of model that should be our goal as we seek to elucidate the observed differences in the levels and trends of the economic well-being of children and the elderly. Such a goal is beyond the purview of this paper; our purpose is primarily descriptive, not explanatory. But the message we wish to present in this section is that the conventional reading of the patterns that we have been describing is not the only, and very possibly not the correct, interpretation.

Procedure

The same types of economic variables will be examined in this section as in the previous one, but the groups we compare are defined by year of birth rather than by age. Specifically, we consider two young and two elderly cohorts: (1) children who were age 0-4 in 1968, the first year for which PSID data are available (and thus were born in the approximate interval from 1964 through 1968), labeled "A" in subsequent tables; (2) those who were age 5-9 in 1968, labeled "B"; (3) adults who were age 55-59 in 1968, labeled "C"; and (4) those age 60-64 in 1968, labeled "D." The two older cohorts were selected such that they would progress through the ages of maximum change in economic status, as indicated in Figure 1, and at the same time be represented by large enough samples in the PSID panel to provide reasonably stable estimates. Note that since the PSID is a longitudinal study, data from the same persons are included for all 15 years from 1968 through 1982 (except for loss through deaths and sample attrition--sample sizes are shown in the right panel of Table 8). For example, those in the first cohort, who were age 0-4 in 1968, had become age 14-18 by 1982, the final year for which data are available. A small proportion of those in this cohort, and a substantial proportion of those in the second cohort, had exited the ranks of dependent children by the later years of data collection. Similarly, those in the third and fourth cohorts were not, as of 1968, in the age range (65 and older) that we have classified as elderly, but they entered that age range during the subsequent years of data collection.[14]

Family Income and Income-to-Needs Ratio

Table 8 parallels Table 3, with the groups now defined by birth cohort. Comparison of these two tables gives a very different perspective on what has been happening to children and the elderly. The left panel

Table 8: Average Total Family Income and Family Income/Needs, for Young and Elderly Birth Cohorts

5 Yr Ave Total Family Income in Thousands of 1982 $, by Birth Cohort

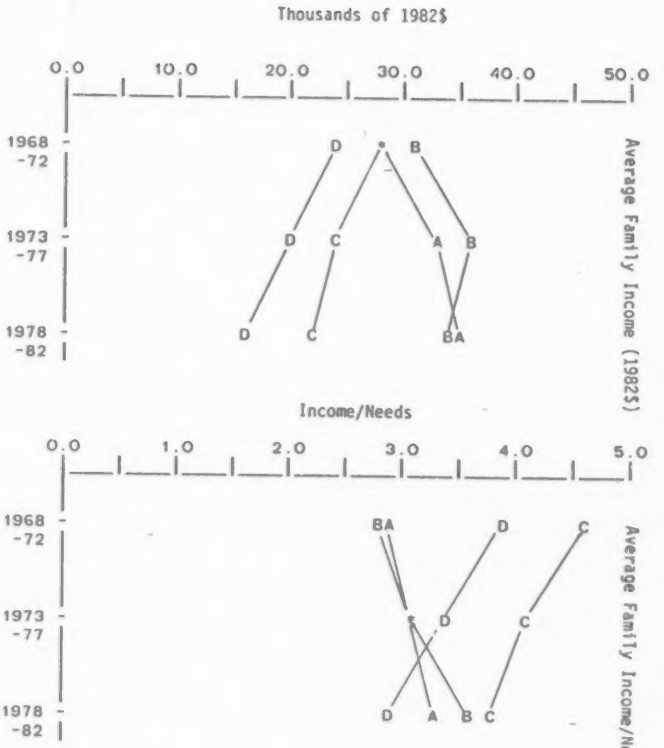
(A) Age <5 in '68	(B) 5-9 in '68	(C) 55-59 in '68	(D) 60-64 in '68
27.9	31.4	28.1	23.5
32.5	35.5	23.7	20.2
35.3	34.1	21.5	16.3

5 Yr Ave Total Family Income/Needs

(A) Age <5 in '68	(B) 5-9 in '68	(C) 55-59 in '68	(D) 60-64 in '68
2.9	2.8	4.6	3.9
3.1	3.1	4.1	3.4
3.3	3.6	3.8	2.9

Unweighted sample sizes

(A) Age <5 in '68	(B) 5-9 in '68	(D) 55-59 in '68	(E) 60-64 in '68
1535	2129	522	408
1443	1925	433	313
1332	1673	385	245



in Table 3 indicated that the average total family income of those under age 10 has changed very little across the 15-year period from 1968 through 1982, whereas the corresponding panel in Table 8 indicates that there has been a substantial improvement in the family incomes of children who were under age 10 at the beginning of this period. The middle panel of Table 3 showed a small increase in the income-to-needs ratio of children from the first to the second five-year period, but no change from the second to third period, whereas the corresponding panel of Table 8 shows a steady increase across all three periods for individual children. Thus,

- While the average economic status of successive cross-sections of children changed very little during the 1968-1982 period, that of individual children improved substantially during the same period.

This pattern observed for these cohorts of children is a reasonable one, given that their parents are generally in a phase of their work careers marked by relatively rapid increases in earnings, the reentry of their mothers into the labor force, and the increasing participation of the children themselves in the labor force.[15]

The contrast between Tables 3 and 8 in the patterns of incomes and incomes-to-needs ratios of the elderly is striking:

- Although the economic status of the elderly as a group improved during the 1968-1982 period, that of the average individual elderly person dropped sharply during that period. This pattern is entirely reasonable when viewed from a life-cycle perspective, since it surely reflects the decline in income that accompanies the exit from the labor force and, for some women, the adverse consequences of widowhood.

Thus, when we compare the trends in the economic status of the young and old cohorts, we find a very different pattern from what we observed when comparing cross-sections of children and elderly in Table 3. There we found that the average family income of the elderly was converging toward that of children, but Table 8 shows that the average family incomes of the young and the old cohorts are diverging: in the first five-year period they were rather similar, but since then those of the young cohorts have been rising while those of the elderly cohorts have been falling. Moreover, while the economic status of the elderly as a whole, as measured by the average income-to-needs ratio, started out below and ended up above that of children, the middle panel of Table 8 shows that the older cohorts started above the younger cohorts and have since converged--with the trends in the opposite directions for the two sets of cohorts.

- The economic status of those in older and younger cohorts went in opposite directions during this 15-year period: contrary to the picture implied by comparison of successive cross-sections of the young and the old, individual children have, on the average, become better off while individual elderly persons have declined in economic status.

The fact that successive cross-sectional samples of the elderly have higher incomes, despite the decline in incomes of the individual elderly, suggests that successive cohorts have had higher incomes than did their predecessors when at the same age level. This interpretation is confirmed by comparisons of the graphs for two periods shown in Figure 1, and again by comparisons of the two five-year birth cohorts of the elderly shown in Table 8: cohort C was better off in the second period than was cohort D in the first period, even though the age ranges of these cohorts are equated in this comparison; and similarly cohort C was better off in the third period than cohort D in the second period. When we combine this observation with the fact that the lines for the two older cohorts in Table 8 are nearly parallel, it is difficult to make a compelling case for a period effect that had a specific impact on the economic status of the elderly; if there were such an age-specific period effect, it would be expected to interrupt the decline associated with age and therefore to prevent the curves for the two older cohorts from being parallel. The picture that emerges is one of successive cohorts entering their elderly years in ever-improving economic conditions. Their trajectory as they get older is downward, very much in the pattern of earlier cohorts, but since they started at higher levels they are also better off at each age level than were previous cohorts of the elderly.

Poverty and Affluence

The percentages of persons in these young and old cohorts who fall above or below the criteria for poverty or affluence are shown in Table 9. The left panel shows the proportion whose family incomes, averaged across the five-year period, were less than their needs standard. There is no clear pattern for the children, just as no consistent trend was observed for those under 10 in Table 4. This holds true for the elderly cohorts as well, although there is a suggestion that the proportion poor increases during the periods when members of a cohort are most likely to leave the labor force.

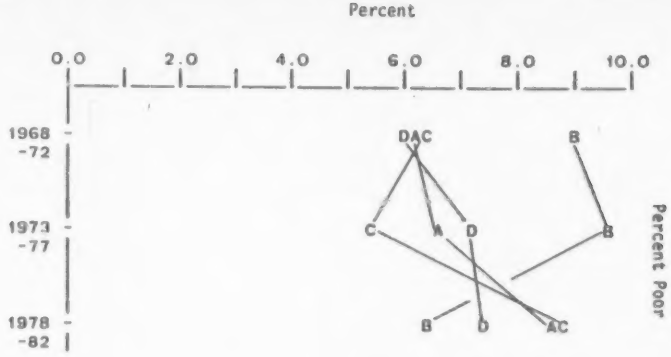
A more extreme definition of poverty (average income-to-needs ratio less than 0.8) is used in the middle panel of Table 9. Here there is more similarity to the corresponding panel of Table 4 than we have observed previously. Among children who were under age 5 in 1968, the proportion in extreme poverty almost doubled, from 2.5 percent in 1968-1972 to 4.9 percent in 1978-1982. This is actually a somewhat larger rise than is observed for all children under age 10 across these years. In contrast, the proportion of the extremely poor in the two elderly cohorts declined somewhat from 1968-1972 to 1973-1977 and showed only a slight increase by 1978-1982. The decline observed for elderly cohorts is not nearly as dramatic as that observed for successive cross-sections of the elderly, but the trend is nevertheless in the same direction.

- Despite the decline in average income and income-to-needs ratios of elderly cohorts during the 15-year period, and despite the slight increase in the proportions of these cohorts in poverty, the proportion in extreme poverty declined over this same period.

Table 9: Poverty, Extreme Poverty, and Affluence for Young and Elderly Birth Cohorts

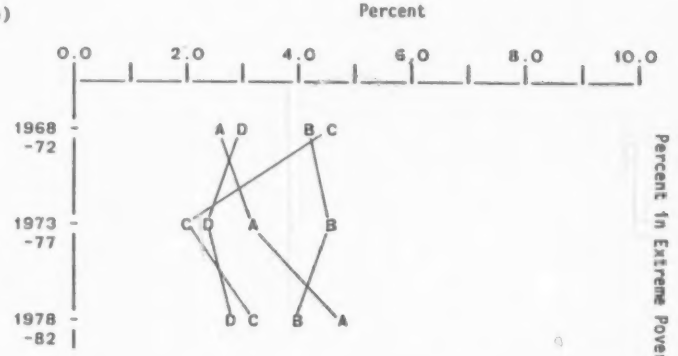
Percent Poor (5 Yr Total Fam Inc < Needs)

(A) Age <5 in '68	(B) 5-9 in '68	(C) 55-59 in '68	(D) 60-64 in '68
6.2	9.1	6.4	6.0
6.7	9.5	5.4	7.2
8.5	6.4	8.8	7.4



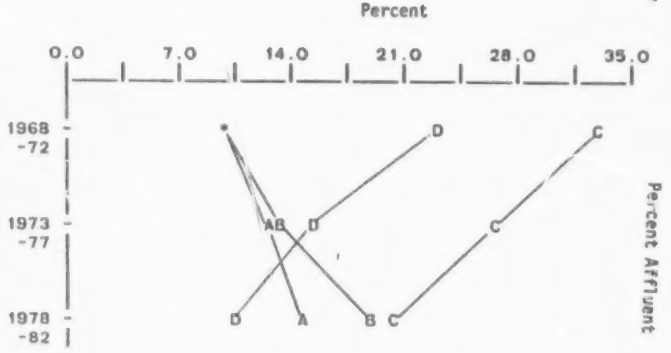
Percent in Extreme Poverty (5 Yr Tot Fam Inc < 80% of Poverty Line)

(A) Age <5 in '68	(B) 5-9 in '68	(C) 55-59 in '68	(D) 60-64 in '68
2.5	4.2	4.5	3.0
3.2	4.5	2.0	2.4
4.9	4.0	3.2	2.9



Percent Affluent (5 Yr Tot Fam Inc > 500% of Poverty Line)

(A) Age <5 in '68	(B) 5-9 in '68	(C) 55-59 in '68	(D) 60-64 in '68
9.6	9.9	32.8	23.0
12.5	13.4	26.9	15.2
15.0	19.1	20.6	10.6



• The safety net has operated more successfully with respect to elderly cohorts than cohorts of children in reducing the proportion of persons in extreme poverty.

Indeed, among those in the youngest cohort at the beginning of the period, the proportion in extreme poverty actually increased during this period, although this may reflect an age-related effect as well as a period-related effect.

When we turn to the opposite end of the economic spectrum and examine the proportion of these cohorts with family incomes exceeding five times their needs, we observe (right panel, Table 9) that the pattern for young cohorts, like that for cross-sections of children, is one of increasing proportions who are affluent. By contrast, however, the time trend for elderly cohorts is in the opposite direction from that for cross-sections of the elderly.

• Whereas the proportion of the elderly population that is affluent has increased by about half during the 15-year period of observation, the proportion of affluent persons in particular elderly birth cohorts has declined by about half during the same period.

This decline is consistent with the decline in average income (and income-to-needs ratio) of persons in these elderly cohorts, and presumably reflects primarily departure from the labor force.

The Role of Transfers in Raising Income-to-Needs Ratios

Trends in the role of transfer programs in raising the economic status of elderly cohorts are shown in Table 10b. (These programs have little impact on the average income-to-needs ratios of children, as was observed in Table 5 and is shown again in the two panels of Table 10a.) The two panels of Table 10b (for the two elderly cohorts) should be compared with the middle panel of Table 5 (for cross-sections of the elderly).

• Whereas the contribution of taxable (nontransfer) income increased across time for the elderly as a whole, it declined sharply for those in the two elderly cohorts.

Private pensions and other sources of income do not make up for the loss of income from jobs as persons in these cohorts retire. On the other hand, an increasing proportion of these cohorts started to collect social security benefits:

• The role of social security and other contributory transfer income sources increased much more rapidly for persons in these particular cohorts than for the elderly group as a whole.

• Welfare (noncontributory transfers) made up only a small proportion of the overall income of the elderly and did not show a

detectable trend either for the elderly as a group or for specific cohorts.

The Role of Transfers in Reducing Poverty

Tables 11a and 11b display the importance of contributory and non-contributory transfer programs in reducing poverty among young and old cohorts, respectively. The left panel of Table 11a shows that the latent poverty level of children in the first cohort increased somewhat, although the latent poverty level of all children under age 10 declined (see Table 6, left panel). No such increase is observed in the second cohort, however (Table 11a, right panel), so we do not place a great deal of confidence in the pattern.

Table 11b shows that there has been a dramatic increase in the latent poverty of the two elderly cohorts; the fact that there has been only a much smaller increase in actual poverty is due to the large increase in income from contributory transfer programs (primarily social security).

- The increase in the overall rates of latent poverty among the elderly masks a much larger increase in the rates of latent poverty among specific cohorts of the elderly.

- The proportion of elderly cohorts who are kept out of poverty by social security increases dramatically as persons in these cohorts get older and withdraw from the labor force.

We must be cautious in drawing causal inferences from this pattern, of course, since it is quite possible that improved social security benefits have permitted more people to retire from the labor force at a younger age than would have been possible in the past.

Summary of Changes in Economic Status Within Cohorts

The preceding tables have focused on changes over time within just two young and two elderly birth cohorts. To provide a larger perspective on those changes, it is useful to examine changes that have occurred within cohorts of persons born in other years as well. Figure 2 repeats the cross-sectional age pattern that was shown in Figure 1 (in Figure 2 the cross-sectional age pattern is the average across all three five-year periods), but superimposed on it are the changes observed within each of four young and five older cohorts.[16]

The general pattern observed in Figure 2 is quite consistent. The improvement in economic status experienced over a five-year period by persons in every one of the cohorts is more positive than are the cross-sectional differences observed between age groups. This is true both for the average income-to-needs ratio and for the percentage poor. For example, the cross-sectional data indicate that those in the 5-9 year age group have a lower income-to-needs level than those in the 0-4 age

Table 10a: Role of Tranfers in Raising Income/Needs Ratio of Young Cohorts

Role of Transfers in Raising Income/Needs: Cohort age <5 in 1968

	(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
	2.9	2.9	2.9
	3.0	3.1	3.1
	3.2	3.3	3.3

Role of Transfers in Raising Income/Needs: Cohort age 5-9 in 1968

	(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
	2.7	2.7	2.8
	3.0	3.0	3.1
	3.5	3.5	3.6

Table 10b: Role of Transfers in Raising Income/Needs Ratio of Elderly Cohorts

Role of Transfers in Raising Income/Needs: Cohort age 55-59 in 1968

(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
4.4	4.5	4.6
3.4	4.0	4.1
2.7	3.7	3.8

Role of Transfers in Raising Income/Needs: Cohort age 60-64 in 1968

(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
3.4	3.8	3.8
2.5	3.4	3.4
1.8	2.8	2.9

Table 11a: Role of Transfers in Reducing Poverty in Young Cohorts

Role of Transfers in Reducing Poverty: Cohort age <5 in 1968

	(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
	10.4	9.7	6.2
	13.1	10.8	6.7
	12.9	10.0	8.5

Role of Transfers in Reducing Poverty: Cohort age 5-9 in 1968

	(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
	15.0	13.4	9.1
	15.1	13.4	9.5
	10.2	9.0	6.4

Table 11b: Role of Transfers in Reducing Poverty in Elderly Cohorts

Role of Transfers in Reducing Poverty: Cohort age 55-59 in 1968

(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
12.1	8.0	6.4
20.2	8.3	5.4
41.4	10.6	8.8

Role of Transfers in Reducing Poverty: Cohort age 60-64 in 1968

(N) No Transf	(S) w/Soc Sec+UI	(A) w/All Transf
17.9	8.1	6.0
38.3	9.0	7.2
47.7	8.6	7.4

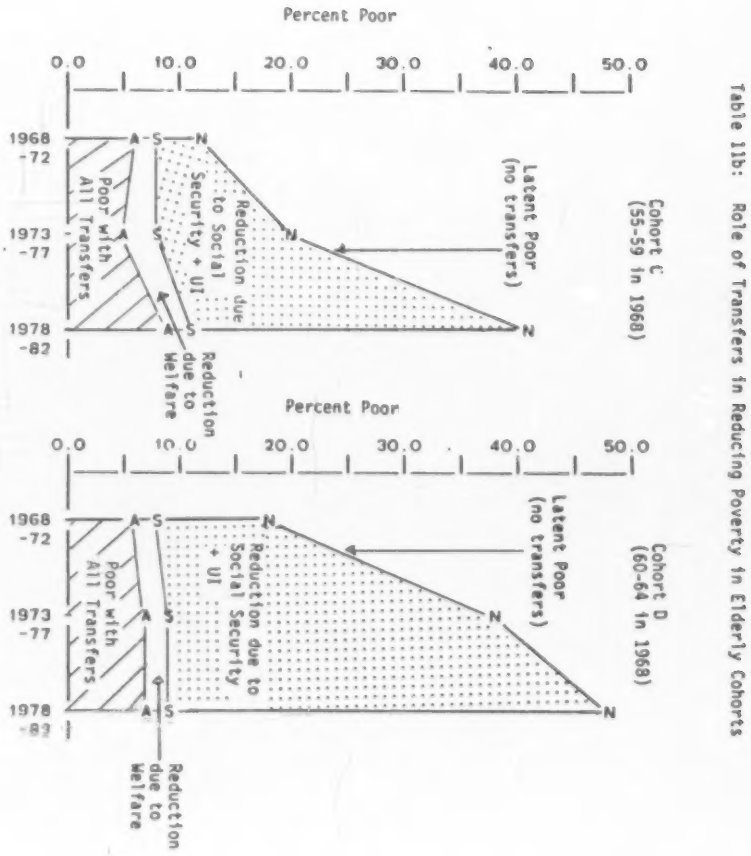
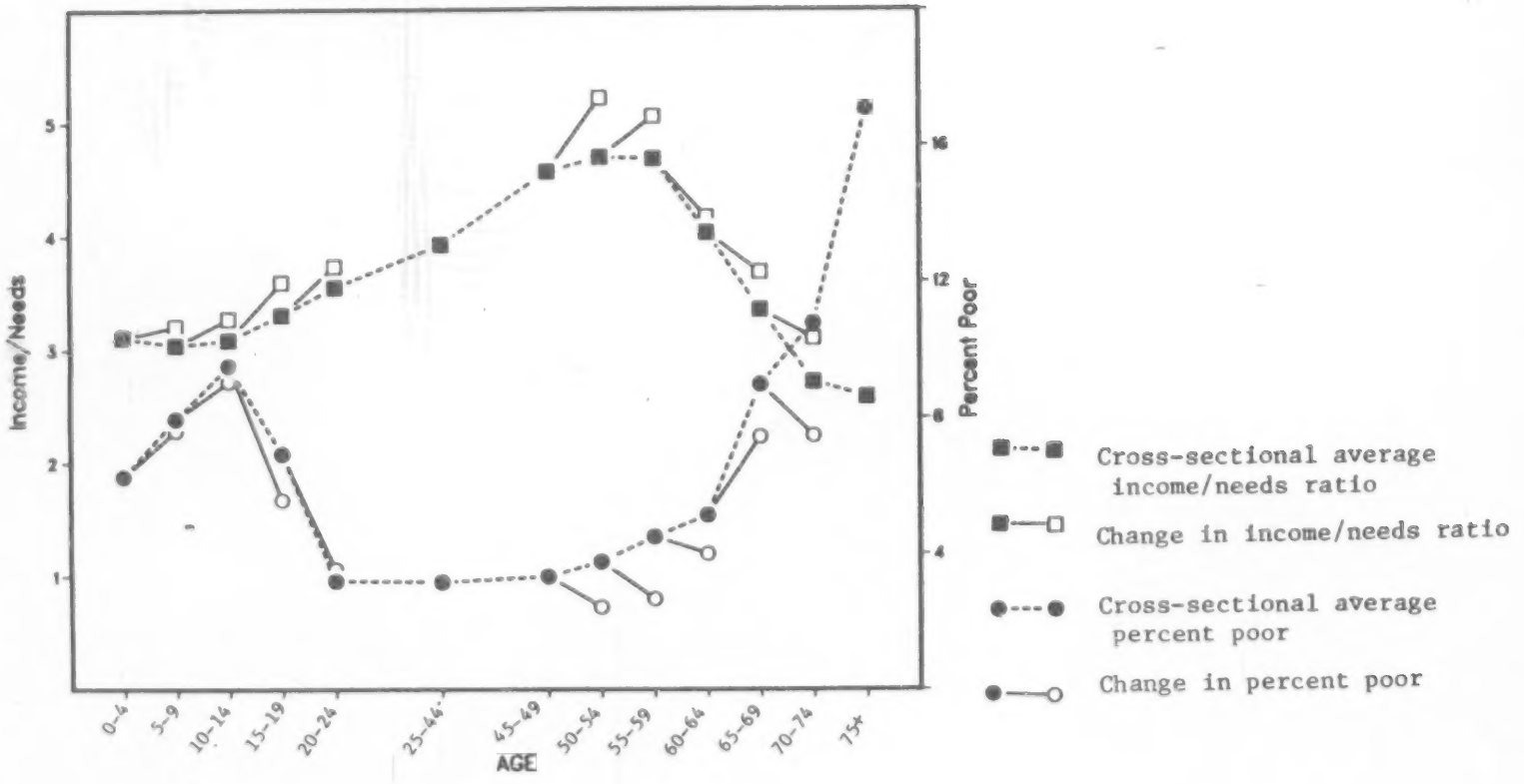


Figure 2: Within-Cohort Changes in Average Income/Needs Ratio and Percent Poor



group, whereas the cohort change data indicate that the income-to-needs ratio improves as children progress from the 0-4 to the 5-9 age range.

In interpreting the differences between Figures 1 and 2, it is helpful to remember that cross-sectional differences between age groups, such as those observed in Figure 1, reflect differences associated both with the age and the cohort of the individuals, whereas longitudinal differences between age groups, such as those observed in Figure 2, reflect differences associated both with the age of the individuals and the period in which the data were collected. For example, the difference in the average economic status of 60- and 70-year-olds in, say, 1985 reflects both differences that are associated with age (such as the proportion in the labor force, differential mortality rates for those with different resources, and so on) and those that are associated with cohort (such as level of earnings during the working years, age at the introduction of social security, and so on).[17] On the other hand, the difference in the average economic status of 60-year-olds in 1975 and 70-year-olds in 1985 (a subset of the same people because of mortality) reflects both differences associated with age and those that are associated with differences between conditions prevailing in 1975 and in 1985 (such as the cost of living and social security benefit levels).

Thus, the consistency in the general pattern of the curves shown in Figures 1 and 2 suggests that there are indeed differences associated with age, and that the age pattern is a logical one from a life-cycle perspective. The differences between Figures 1 and 2, on the other hand, could equally well be attributed either to factors associated with period or to factors associated with cohort (or to a combination of both types of factors). It also appears that there is an interaction between age and either period or cohort: the period/cohort effects appear to be stronger for older cohorts than for young cohorts, although this is somewhat obscured because the period/cohort effects work in the opposite direction from age effects. The net effect of the age and period and/or cohort effects is that the income-to-needs ratio of older cohorts declines less sharply than the differences between age groups observed in cross-sectional data. Indeed, among persons in older cohorts at the lower tail of the distribution, period/cohort effects seem to be stronger than age effects, in that for four of the five older cohorts shown the proportion poor has declined, not increased, with age. This suggests that period/cohort effects in recent years have been especially important for the elderly with limited resources.

What have we learned by examining the data from the perspective of cohorts rather than of age levels? Perhaps the most obvious lesson is also the most important: namely, the reminder that trends observed by comparing people who are of a given age at different times may have little in common with the trends experienced by individuals as they grow older. It certainly should come as no surprise to observe that economic status tends to decline as people withdraw from the labor force, nor that the economic status of children tends to improve as they (and their parents) get older. Nevertheless, it is important to remind ourselves of these trends when we observe that the economic conditions of the elderly, as an age group, have improved over the past

decade or so while those of children, again as an age group with changing cohort composition, have changed very little. Another lesson that the cohort perspective provides is that at least part of the improvement in the economic well-being of the elderly age group may represent the effects of factors that came into play in the past rather than during the period under study. That is, the improved well-being of the elderly during recent years may not be attributable, at least in its entirety, to conditions that were changing over those same years, such as the indexing of social security benefits. It is entirely possible that part of the improvement represents differences in cohorts of persons as they enter the ranks of the elderly. If later cohorts enter retirement and old age with greater accumulated assets, pension rights, and entitlement credits for social security benefits than did their predecessors, then these cohort effects may account for some if not all of the improvement in the average economic status of the elderly.

THE ROLE OF RACE, SEX, AND LIVING ARRANGEMENTS

Thus far we have examined the different age subgroups as if each were a homogeneous collection of individuals. In reality, of course, this is not true. Within the ranks of children and the elderly, for example, there are distinguishing demographic characteristics with strong associations to economic well-being. Here we will explore some such characteristics--race, sex, and living arrangements.

Race and Sex Differences in Economic Well-Being

Race is a well-known factor in the economic fortunes of children. For the elderly, sex as well as race are strongly correlated with economic status, although here we concentrate on their sex differences.[18] The magnitudes of the differences associated with race for children and sex for the elderly are shown in Table 12, which provides information on three measures of economic status: family income-to-needs ratio, poverty status, and latent poverty status (the indicator first used in Table 5 of whether the people in question would be poor if all transfer income they received were subtracted from their income). For all three measures, we find very large differences between black and white children and considerably smaller, although by no means insignificant, differences between elderly men and women.

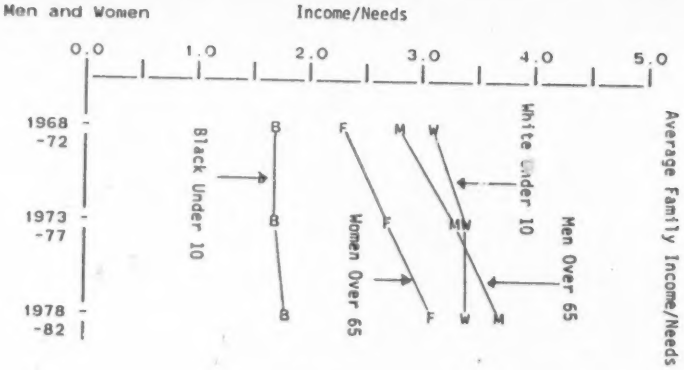
- Despite fluctuations in the economic status of children over time, a large gap has persisted between the economic status of black and white children.

The family income-to-needs ratio for black children has remained at little more than half that for white children; a black child has been about 8 to 10 times more likely than a white child to be poor and about 6 times more likely as a white child to be in latent poverty.

Table 12: Economic Status By Race, Sex, and Age

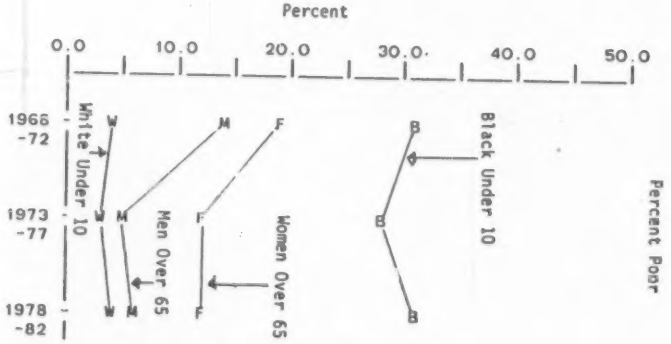
5 Yr Ave Family Income/Needs: Black and White Children and Elderly Men and Women

(W) White Child	(B) Black Child	(M) Elder Men	(F) Elder Women
3.1	1.7	2.8	2.3
3.4	1.7	3.3	2.7
3.4	1.8	3.7	3.1



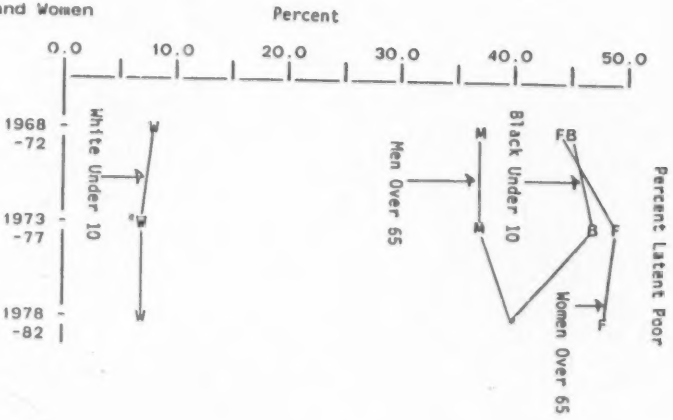
Percent Poor: Black and White Children and Elderly Men and Women

(W) White Child	(B) Black Child	(M) Elder Men	(F) Elder Women
3.9	30.8	13.5	18.8
2.9	27.5	5.3	12.3
3.8	31.0	6.0	12.0



Percent in Latent Poverty: Black and White Children and Elderly Men and Women

(W) White Child	(B) Black Child	(M) Elder Men	(F) Elder Women
7.5	45.1	37.4	43.5
7.4	46.5	37.4	48.5
6.9	40.1	40.4	48.2



An interesting story about the role of public transfers in the changing economic status of children can be told by comparing their poverty rates (middle panel of Table 12) and latent poverty rates (right panel of Table 12). One way of estimating the degree to which transfers prevented poverty is to compare the latent poverty rate for that time period with the actual poverty rate; the former is indicative of how many people would have been poor if they had received no public transfers, and the latter reflects how many actually were poor even with the transfers they did receive. We find for both black and white children that the strength of transfers in eliminating poverty rose between the first and second periods and then declined between the second and third periods. The recent decline was, however, much more pronounced for black children than for white children. Whereas transfers lifted nearly 20 percent of the black children out of poverty during the 1973-1977 period, only about 10 percent were brought out of poverty by transfers during 1978-1982. Thus:

- Transfers were much less effective in the more recent period than in earlier ones in keeping black children out of poverty.

In fact, between the 1973-1977 and 1978-1982 periods, actual poverty rates among black children increased despite a large decrease in the pretransfer (latent) poverty rate.

Sex differences in economic status among the elderly are much less striking than race differences among children, but they are just as persistent. The income-to-needs position of men is higher than that of women by about 20 percent, and women have a significantly higher likelihood of actual and latent poverty. Thus:

- By all accounts, elderly women have fared worse economically than have elderly men.

Neither group of the elderly, however, has fared as poorly as black children when transfers are counted as part of their income. Rates of latent poverty for elderly women, though, have been on a par with those of black children.

Differences in Living Arrangements

Living arrangements have often been targeted as a primary cause of poverty. Here we investigate the extent to which differential likelihoods of living in a husband-wife family can account for the race and sex differences we have noted. We first investigate the magnitude of race and sex differentials in the likelihood of living in a husband-wife family and then estimate the economic situation if these differentials in living arrangements were eliminated.

Increases in divorce rates coupled with decreases in marriage rates underlie the declines of recent years in the proportions of people living in husband-wife families. A persistent aspect of the living

arrangements of the population, however, has been a higher average economic status for persons living in husband-wife families relative to those in other living arrangements. The reason for such a differential is the higher earned incomes of married men relative to women and unmarried men, coupled with low amounts of transfers from divorced men to their former family members. The sex differential in earned income is due, in large part, to the higher wage rates of men but also, to some extent, to the fewer work hours of women. The marital status differential among men is more difficult to explain, but it may reflect health differences and other differences in characteristics associated with productivity or other factors employers consider important.

Our investigation of living arrangements focuses on the distinction between living in a husband-wife family for all five years of a five-year period and any other living arrangement. Examples of the latter range from living in a husband-wife family for only part of the five-year period to never living in a husband-wife family during that five-year period. Just what it means to be living in a husband-wife family varies with the stage of life. For children, living in a husband-wife family generally means living with both parents, although the husband-wife pair could be grandparents or guardians other than a child's natural parents. For the elderly, residing in a husband-wife family would generally mean that their spouse was present, although it could mean that they are living with a married son or daughter who is part of the husband-wife pair.

Table 13 shows patterns of husband-wife living arrangements for each of the three five-year periods of the analysis. Using single-year data, Bianchi and Farley (1979) found age-adjusted racial differences showing white children to be about 1.5 times more likely than black children to be living with both parents in any given year during the period 1968-1977. With our multiyear data, we find that white children were almost twice as likely as black children to live in a husband-wife family for all five years in each of the latter two five-year periods. The differential we found in the first five-year period, while somewhat less marked, was also quite substantial.

- With respect to children, we find a race differential for residence in a husband-wife family that is even larger than what one-year assessments of living arrangements have shown.

The sex differential in living arrangements of the elderly was largest in the middle five-year period, when men were about 2.25 times more likely than women to be living in a husband-wife family for all five years. As with children, the differential grew from the initial five-year period, but, even in that initial period, elderly men were almost twice as likely as elderly women to be living in a husband-wife family throughout the five years.

- For the elderly, there is a sex differential in the likelihood of living in a husband-wife family that exceeds even the race differential for children.

Table 13: Percent of Persons in Husband-Wife Families Throughout the Five-Year Period

Percent of Persons in Husband-Wife Families Throughout the Five-Year Period

(W) White Child	(B) Black Child	(M) Elder Men	(F) Elder Women	(O) Age 10-64
83.0	51.4	69.6	35.4	72.3
80.9	41.6	69.8	30.6	68.5
77.3	40.4	71.8	34.1	65.7

Unweighted Numbers of Observations

(W) White Child	(B) Black Child	(M) Elder Men	(F) Elder Women	(O) Age 10-64
1840	1813	255	350	10314
1615	1257	275	398	10494
1769	1272	321	523	10223

The greater likelihood of men living in a husband-wife family can be explained by the earlier death of men, on average, with women more likely to be left in widowhood, as well as the greater likelihood that men will remarry after a divorce.

Procedures for Evaluating the Influence of Living Arrangements

The large differentials in living arrangements, coupled with the fact that the economic status of persons living in husband-wife families is considerably higher than that of persons in other living arrangements, suggests that a large part of the race and sex differentials in economic status can be attributed to the race and sex differentials in living arrangements. To address this issue, we decompose the mean income-to-needs levels (and poverty rates) on the basis of living-arrangement-specific values for the economic status measure.

The product of the status level typical of people in a given living arrangement and the proportion of people in that given living arrangement, summed over all living arrangements, produces the overall mean (or rate). Differences between the overall means (or rates) of two subgroups of people, or of the same subgroup of people at different points in time, are thus a function of differences in living arrangements and differences in the status level associated with each living arrangement, and these components can be estimated separately.[19] Here we are interested in the first of these components. The relative magnitude of this component can be estimated by (1) recalculating the overall mean (or rate) for one subgroup, holding constant the living-arrangement specific values for economic status but setting the proportions in the various living arrangements equal to that of the other subgroup, (2) taking the difference between this recalculated mean (or rate) and the observed one for that subgroup, and (3) calculating what fraction this difference is of the total difference between the overall means (or rates) of the two subgroups.[20] We focus on the role of differences in propensities to live persistently in a husband-wife family rather than some other living arrangement.[21]

This procedure for calculating the influence of differences in living arrangements is mechanical by nature, but underlying it is the assumption that the people moved from living arrangements other than husband-wife families to husband-wife families would, on average, experience an increase in economic well-being that placed them on a par with the people who started out in husband-wife families. How close this assumption fits with reality is debatable. Evidence from wage analyses suggest that the calculation with this approach will tend to establish an upper limit on the extent to which increases in the proportion of people living in husband-wife families would result in improvements in economic well-being.[22]

Influence of Living Arrangements on Race and Sex Differences in Economic Well-Being

With this in mind, let us remove race and sex differentials in living arrangements and see what happens to the race and sex differentials in economic well-being. We do this separately for the two subgroups of interest--first, black and white children, then, elderly men and women. For children, the black distribution with regard to living in a husband-wife family is set equal to that of whites, who have the higher proportion of people in husband-wife families. The average economic status is then recalculated by applying the new distribution with regard to living arrangements to the existing living-arrangement-specific values for economic status. This same procedure is followed for the sex differential for the elderly: the women's distribution of living in a husband-wife family is set equal to that of men, who have the greater likelihood of being persistently in a husband-wife family, and the women's average economic status is then recalculated using this new distribution along with the women's living-arrangement-specific values on economic status.

Tables 14 and 15 show the effects of eliminating the living arrangement differentials between black and white children and between elderly men and women. Three measures of economic well-being--family income-to-needs ratio, poverty status, and latent poverty--are presented here.

Looking first at the situation for black and white children (Table 14), we see that:

- Only about one-sixth to one-third of the gap in the economic well-being of black children relative to white children could have been eliminated if black children had been as likely as white children to live in husband-wife families. The extent to which the racial gap would have been narrowed in this way has increased over time.

The extent to which elimination of the differential in living arrangements would have reduced the racial gap in children's economic well-being has varied considerably with the measure of economic well-being, although for every measure examined here the gap would have been reduced by a sizable portion, but always less than half. The portion of the gap in family income-to-needs levels that would have been eliminated rose steadily from about one-seventh in the first five-year period to one-fourth in the last five-year period. Likewise, the portion of the gap in the poverty rate rose continuously from about one-fifth, to one-fourth, and on up to one-third. The continuous reduction in the gap in economic well-being does not, however, hold for the latent poverty rate; the reduction in the racial gap for chances of being in latent poverty rose substantially from the first five-year period to the second but then fell some from the second period to the third.[23]

A very large share of the sex differential in the economic well-being of the elderly might have been eliminated if the chances of elderly women being in a husband-wife family had been equal to those of elderly men (see Table 15).

Table 14: Race Differences Among Children in Economic Well-Being, Actual and Assuming Blacks Are As Likely to Be in Husband-Wife Families as Whites

% Black-White Economic Difference due to Differences in Living Arrangements	13%	18%	25%	20%	29%	36%	28%	42%	33%

Children's 5 Yr Ave Family Income/Needs: Actual and With Proportion of Blacks in Husband-Wife Families Equal to That of Whites

	(W) White Actual	(B) Black Actual	(b) Black Adj
1968-72	3.1	1.7	1.9
1973-77	3.4	1.7	2.0
1978-82	3.4	1.8	2.2

Percent of Children Poor: Actual and With Proportion of Blacks in Husband-Wife Families Equal to That of Whites

	(W) White Actual	(B) Black Actual	(b) Black Adj
1968-72	3.9	30.7	25.5
1973-77	2.9	27.5	20.4
1978-82	3.8	31.0	21.3

Percent of Children in Latent Poverty: Actual and With Proportion of Blacks in Husband-Wife Families Equal to That of Whites

	(W) White Actual	(B) Black Actual	(b) Black Adj
1968-72	7.5	45.1	34.7
1973-77	7.4	46.5	29.9
1978-82	6.9	40.1	29.3

Table 15: Sex Differences Among the Elderly in Economic Well-Being, Actual and Assuming Women Are as Likely to Be in Husband-Wife Families as Men

	1968 -72	1973 -77	1978 -82
% Male-Female Economic Difference due to Differences in Living Arrangements	51%	73%	124%
	124%	77%	66%
	77%	32%	85%

Elderly's 5 Yr Ave Family Income/Needs: Actual and With Proportion of Women in Husband-Wife Families Equal to That of Men

(M) Men Actual	(F) Women Actual	(f) Women Adj
2.8	2.3	2.5
3.3	2.7	3.1
3.7	3.1	3.8

Percent of Elderly Poor: Actual and With Proportion of Women in Husband-Wife Families Equal to That of Men

(M) Men Actual	(F) Women Actual	(f) Women Adj
13.5	18.8	12.3
5.2	12.3	6.9
6.0	12.0	8.1

Percent of Elderly in Latent Poverty: Actual and With Proportion of Women in Husband-Wife Families Equal to That of Men

(M) Men Actual	(F) Women Actual	(f) Women Adj
37.4	43.5	38.8
37.4	48.5	44.9
40.5	48.2	41.6

- In almost every time period and for all three measures of economic well-being, at least two-thirds of the gap in economic well-being between elderly women and elderly men might have been eliminated if the women were as likely as the men to be in a husband-wife family.

This method of estimating the effect of differences in the frequency of living arrangements establishes a very strong influence for the elimination of living arrangement differentials between elderly men and women in reducing the gap in economic status between the sexes. For some measures of economic status, in fact, the gap would have been reversed: if elderly women had been just as likely as elderly men to live in husband-wife families, their economic positions as a group would have been somewhat better than that of elderly men.

Influence of Trends in Living Arrangements on Economic Well-Being

A great deal of attention has focused on the decline in the proportion of people living in husband-wife families. Returning to Table 13, we see a decline in this proportion for the intermediate age group and for children, both black and white. The pattern for the elderly has been less consistent with this trend, holding steady and then rising some for elderly men and falling but then rising almost back to the initial level for elderly women. To what extent are the changes in the relative economic status of children and the elderly caused by the differential changes over time in the likelihood of living in a husband-wife family?

To answer this question, we calculated what the average economic status would have been if the living-arrangement-specific values of economic status had remained at their observed levels, but the proportion living in husband-wife families in the second two five-year periods were held constant at the proportion living in husband-wife families in the first five-year period. This calculation of adjusted economic status was done separately for black children, white children, and the elderly. The results for children are presented in Table 16, along with the values that were actually observed for them. The elderly are not presented in the graph because this adjustment made virtually no difference for their typical economic status; their changes in living arrangements over time were too modest to have much impact on their economic status. Since the changes over time in living arrangements for children were greater in magnitude, this adjustment did make more of a difference for them, particularly if they were black. Without the changes that took plack in living arrangements, children's economic status would have improved some over time. However,

- The changes that have occurred in chances of living in a husband-wife family seem to have played a very modest role in the changes in the relative economic well-being of the elderly and children.

The combination of little effect for the elderly of holding the proportion in husband-wife families constant and only slight to moderate

Table 16: Differences Among Children in Economic Well-Being Due to Trends in Living Arrangements, By Race

Children's 5 Yr Ave Family Income/Needs: Actual and With Proportions of Children in Husband-Wife Families at 1968 Levels

(W) White Actual	(W) White Adj	(B) Black Actual	(b) Black Adj
3.1	3.1	1.7	1.7
3.4	3.4	1.7	1.8
3.4	3.5	1.8	2.0

Percent of Children Poor: Actual and With Proportions of Children in Husband-Wife Families at 1968 Levels

(W) White Actual	(W) White Adj	(B) Black Actual	(b) Black Adj
3.9	3.9	30.8	30.8
2.9	2.8	27.5	26.0
3.8	3.1	31.0	28.1

Percent of Children in Latent Poverty: Actual and With Proportions of Children in Husband-Wife Families at 1968 Levels

(W) White Actual	(W) White Adj	(B) Black Actual	(b) Black Adj
7.5	7.5	45.1	45.1
7.4	7.0	46.5	42.6
6.9	5.7	40.1	36.9

improvements for children from this same adjustment strongly suggests that the recent trends in living arrangements cannot account for very much of the recent deterioration of the economic status of children relative to the elderly. Because the current and future trends in movement out of husband-wife families are likely to moderate, with divorce rates leveling off or possibly decreasing, future living arrangement changes are likely to be no greater force in generating differences in economic status.

SUMMARY

We find much support in the PSID data for the proposition that the economic status of the elderly has improved relative to that of the young. Poverty rates for the elderly were initially much higher than for the young but by the early 1980s had become nearly equal. The average level of the economic status of the elderly, as indicated by family income adjusted for family size, began substantially lower than that of children but ended up higher. Higher social security benefits played a prominent role in producing these trends for the elderly; transfers to children played less of a role at the end of the period than at the beginning.

However, a more complete demographic analysis of the relationship between age and economic status produced a number of insights that are not part of the conventional wisdom: perhaps most important, the apparent improvement in the economic status of the elderly that shows up in recent cross-sectional data is due in large part to new cohorts of elderly entering older age in considerably better economic circumstances than earlier cohorts. On average, individual elderly people became worse off economically as they aged. The focus on the elderly and children was found to obscure a second important fact: the average economic status of both the elderly and children was substantially lower than that of the large portion of the population in the broad age range between these two groups. Not only was the economic status of this middle group higher, but by all measures the gap between the very young and the middle-aged grew, and by some, but not all, measures the gap between the elderly and the middle-aged grew as well. Discussions of redistribution clearly need to include all three groups. A third area under investigation was the extent to which the trends could be attributed to changes in the structure of families. The evidence was not supportive of a major role for family structure changes: although substantially fewer children lived in intact families at the end than at the beginning of the period, the economic status of both black and white children would have improved relatively little had the families in which they lived been as stable in the early 1980s as they were in the late 1960s.

Family structure differences were somewhat more important in explaining racial differences in the level of economic status of children and in gender differences in the level of economic status of elderly men and women. For children, however, the effects were surprisingly modest: less than one-third of the differences in the average level of economic status and in the poverty rates of black and white children could be

accounted for by differences in family structure. For the elderly we found that the economic status of women would have equalled or exceeded that of men had their family structures been similar.

NOTES

[1]The size of the income pie could be presented in a number of different ways. We chose the aggregate measure of personal income that essentially includes all components of income received by persons but does not subtract taxes. These income figures are expressed on a per-capita rather than a per-household basis because household formation is endogenous to the process under investigation.

[2]The data on cash and in-kind transfers are from Danziger and Gottschalk (1984, Table 1, pp. 188-189), after conversion from a per-household to a per-capita basis.

[3]The design of the PSID sample, when accompanied by adjustments to the weights for differential nonresponse, produces samples within each period that are reasonably representative of the U.S. population. Comparisons of the 1968 and 1980 PSID samples with Current Population Survey samples (Becketti et al., 1983, Duncan et al., 1984a) reveal few significant differences that cannot be explained by differences in definition of units of interviewing. Immigrants to the United States since 1968 are <u>not</u> represented in the PSID sample.

[4]Note that the concept of age is somewhat ambiguous with a five-year accounting period; an individual 63 years of age in the first of the five years will be 68 by the end and thus will have spent three years of the period in the "elderly" status of being at least age 65, although he or she remains in the middle-age classification for our purposes.

[5]Other possible adjustments include the valuation of in-kind benefits (including work-related in-kind fringe benefits), taxes paid, ownership of durables, resource allocation within families, amount of leisure time available, and work-related expenses. Danziger et al. (1984) estimate the importance of adjustments to cash income for taxes paid, durables, family size and composition, and use of the individual rather than the household as the unit of analysis. They find that the family size and composition adjustments are by far the most important. Smeeding (1985) takes a more comprehensive look at the importance of these adjustments, plus adjustments for the allegedly greater under-reporting of income among the elderly with data from the 1979 Current Population Survey. He estimates that the ratio of family income of elderly to nonelderly households increases from .52 with no adjustments; to .59 with adjustments for taxes paid, in-kind transfers, fringe benefits, other in-kind income, and various employer contributions; to .64-.84 for family size, depending on how one adjusts for family size, and by an additional 15 percentage points for the

differential underreporting. The implications of these factors for this analysis are uncertain. We cannot directly compare our estimates with those of Smeeding because our data are organized by individual rather than household. In spite of this possible source of noncomparability, the ratio of family income of the elderly to the 10-64 cohort during the 1978-1982 period (.56) is not that different from Smeeding's .52 estimate. Adjustments for family size in the PSID raise the ratio to .80 (versus .64 for Smeeding). The crucial question is whether there is as much differential underrporting in the PSID as in the CPS. The total amount of underreporting appears to be less in the PSID, but the age distribution of underreporting in the PSID is not known.

6The poverty threshold for a family of four in 1982 dollars was approximately $10,000. A family of four with a family income of $25,000 would have an income-to-needs ratio of 2.5. A family of four with an income of $8,000 would be deemed poor and have an income-to-needs ratio of 0.8. Family size adjustments other than the government's official poverty standard have been proposed. The one estimated by van der Gaag and Smolensky (1982) based on expenditure data results in a considerable improvement in the estimated relative status of the elderly (Smeeding, 1985).

7Thus, a person living in a family of four with a poverty-level needs standard of $10,000 would be affluent if his or her five-year average family income exceeded $50,000.

8The poverty rates obtained with PSID data are substantially lower than those obtained from the Current Population Surveys for several reasons: first, the PSID rates are averaged over a five-year period and thus do not classify those individuals as poor whose family incomes were below the poverty line in one or two of the five-year periods but whose <u>average</u> family income was above the poverty line. Second, considerably more income is reported by PSID than CPS respondents, leading to lower single-year poverty counts. In 1975, for example, the CPS estimate of poverty was 12.3 percent and the comparable estimate from the PSID was 8.9 percent. These income differences cannot be attributed to demographic differences in the samples (Becketti et al., 1983; Duncan et al., 1984a). A comparison with welfare program aggregates showed that the PSID accounted for more than 90 percent of total noncontributory cash transfers, while comparable rates for the CPS are in the 70-80 percent range (Duncan et al., 1984b). A final piece of evidence comes from a validation study in which a sample of workers from a large manufacturing firm were interviewed with the PSID instrument and their responses were checked against very accurate company records. Comparisons of interview reports of annual earnings with company records revealed some error <u>variance</u> but no <u>bias</u> (Duncan and Hill, 1985).

9One could argue that general tax payments are a type of insurance payment for the noncontributory programs. However, the relationship between payment and receipt in these programs is much less direct than in the contributory programs.

[10]For example, if the income-to-needs ratios were 2.0, 2.0, 2.5, 2.5 and 2.0, then the four year-to-year percentage changes would be 0, 25 percent, 0, and -20 percent, respectively, and the average would be 45 percent/4=11.25 percent. Duncan (1983) shows that the extent of instability across groups in the population using this measure is similar to measures of the variance and standard error of estimate of a simple regression line of the income measures on calendar time.

[11]To obtain this measure, we regressed the five yearly observations of the natural logarithm of real income-to-needs for each individual on calendar time. The slope of this bivariate regression can be interpreted as the real annual growth rate in income-to-needs. If this slope is positive, then the individual's income-to-needs rose faster than inflation.

[12]The peak ratio in the 1968-1972 period was reached by those who were age 55-59 in 1968, but in the 1978-1982 period, the peak was reached by those who were age 50-54 in 1978, perhaps reflecting a trend toward earlier retirement.

[13]To do so would require the imposition of a priori constraints (e.g., the equality of certain parameters, as suggested by Mason et al., 1973), with unknown and possibly substantial bias in the estimates if the constraints are misspecified, and often highly magnified ramifications of measurement error.

[14]A comparison of changes in income and income-to-needs for elderly cohorts in the Panel Study of Income Dynamics and the decennial census is presented in Appendix Table A-1. Similar patterns are found in both data sources.

[15]The slight decline in family income observed for those in the second cohort probably reflects the fact that an increasing proportion of these persons depart from their parental homes and establish their own households. Since the size of these new households is often smaller as well, their average income-to-needs ratio continues to rise.

[16]The changes are shown as starting at the average level for persons initially at a particular age level, and the shift is the average change observed over a five-year period for those starting in that age range. Each such shift is the average across two five-year periods: for example, the shift for those initially age 0-4 is the average change experienced by those age 0-4 in 1968 between 1968-1972 and 1973-1977, and by those age 0-4 in 1973 between 1973-1977 and 1978-1982.

[17]The terms period and cohort are not always used in the same way, so the reader may appreciate explicit definitions of these terms as we are using them. By period we mean the time at which an observation is made--here, the year(s) for which household income and needs are measured. Therefore, by period-related factors we restrict ourselves to nonlagged variables. By a birth cohort we mean individuals

born in a particular year or range of years, and by cohort differences we mean differences between persons in different cohorts. Some cohort differences may arise at birth--for example, cohorts born in this century vary widely in their size, with important implications for economic well-being, according to Easterlin (1980); while other cohort differences develop at older ages--for example, depending on the unemployment rate when a birth cohort is at the beginning of the normal working years, or social security coverage during the working years. Cohort effects could also be described as nontransitory, lagged interaction effects of age and period, but it is useful to distinguish this particular type of age-period interaction from other types of interactions involving age, period, and cohort.

[18]Because the number of elderly blacks is quite small in the PSID data, our investigation of subgroup differences for the elderly will be limited to sex differences only.

[19]The difference in overall means for two subgroups A and B could be decomposed in two similar ways:

$$(1)\quad (\bar{I}_A - \bar{I}_B) = \sum_{i=1}^{n} ((p_{iA} - p_{iB})\bar{I}_{iB}) + \sum_{i=1}^{n} ((\bar{I}_{iA} - \bar{I}_{iB})p_{iB}) + \sum_{i=1}^{n} ((\bar{I}_{IA} - \bar{I}_{IB})(p_{iA} - p_{iB}))$$ and

$$(2)\quad (\bar{I}_A - \bar{I}_B) = \sum_{i=1}^{n} ((p_{iA} - p_{iB})\bar{I}_{iB}) + \sum_{i=1}^{n} ((\bar{I}_{iA} - \bar{I}_{iB})p_{iA},$$

where p_i is the proportion in living arrangement i and I is economic status. In each case, the first component is the one attributable to differences in the distribution across the n different living arrangements.

[20]The decomposition for this analysis used race-sex-living arrangement-specific values and proportions for the calculations, thus the recalculated status values for children and for the elderly are race- and sex-adjusted.

[21]Another possibility would have been to distinguish between living in a husband-wife family at least one of the five years and never living in a husband-wife family during that time. This would have meant higher proportions in the husband-wife living arrangement but a lower economic status for them. Thus, it is unlikely that the results would be dramatically altered by changing where the line is drawn in distinguishing husband-wife families from other living arrangements.

[22]Hill's (1979) analysis suggests that prospective marriage partners for the unmarried female household heads are likely to have lower earnings than married men have. Whereas marital status had little influence on the wage rates of women, there was a strong detrimental effect of being unmarried on the wage rates of men.

[23]The reason for the decline is that the most recent period registered the smallest differential in the chances of being in latent poverty between black children in husband-wife families and black children in other living arrangements. This ran counter to the living arrangement differential in actual poverty status for black children.

APPENDIX

In this appendix, we investigate the comparability of results between PSID and census data and find two reassuring and one puzzling set of results. Our runs come from the 1970 and 1980 census files on the total household income, income-to-needs and poverty rates of individuals in four 5-year age cohorts, and we compare them with similar, but not precisely analogous, data from the PSID. For the 1979 figures we used a 1980 file extracted by the Population Studies Center of the University of Michigan from the 1980 census one-in-a-thousand file. The 1969 information came from a 1970 census one-in-a-thousand file put together by the Center for Demography and Ecology at Wisconsin as part of their '40-'50 census project. In both cases our population base was individuals living in households and falling into specified age ranges. Income is measured at the household level and inflated to 1982 price levels.

The PSID files are the same ones used in the body of the paper. The 1969 and average 1968-1972 information comes from individuals in the specified age ranges who were in PSID "families" between 1969 and 1973. The 1979 and average 1978-1982 information comes from individuals in PSID "families" between 1979 and 1983. Note that the requirement that PSID individuals be alive in 1971-1973 and 1981-1983 introduces some noncomparability with respect to the census figures.

Table A-1 shows that the patterns of change in means are quite similar for the total household income and income-to-needs figures but very different for the poverty figures. Census and PSID data both show that the older cohorts have more negative changes in income and income-to-needs as compared with the younger cohorts, and both show real declines in average income and income-to-needs ratio for the 55-59 and 60-64 (age in 1968) cohorts.

There is a puzzling lack of correspondence between the poverty trends for the four groups. Census figures show that the oldest cohort has fared the best, while PSID figures show that they have done the worst. The mean income-to-needs figures would lead to expectations that poverty rates should have increased more for the oldest group, although the census patterns of poverty and income-to-needs could be consistent if the bottom portion of the income-to-needs distribution has become considerably more compressed. We are unable to say which, if either, of these two conflicting data sources is correct.

Table A1

Changes in Family Income, Income-to-Needs and Poverty Rates Between 1969 and 1979
for Four Cohorts of Middle-Aged Individuals in the PSID and Census

	Five Year Average PSID		Single-Year PSID		Single-Year Census		Percentage Change Between 1969 and 1979		
Age in 1969	1968-72	1978-82	1969	1979	1969	1979	Five-Year Average PSID	Single-Year PSID	Single-Year Census
Total Family Money Income (in 1982 dollars)									
45-49	36,430	30,362	36,109	32,679	32,425	32,983	-17%	-9%	+2%
50-54	30,550	24,912	32,013	27,937	30,705	27,436	-19	-13	-11
55-59	28,070	21,531	27,794	22,032	27,719	20,939	-23	-21	-24
60-64	23,490	16,252	26,193	18,536	23,662	18,460	-31	-29	-22
Family Income-to-Needs									
45-49	4.2	4.8	4.0	4.9	3.9	4.5	+14%	+22%	+14
50-54	4.1	4.2	4.0	4.6	4.1	3.9	+1	+14	-5
55-59	4.6	3.8	4.4	3.9	4.0	3.3	-17	-12	-18
60-64	3.9	2.9	4.3	3.2	3.7	2.9	-25	-25	-20
Poverty Rates									
45-49	5.2	3.1	5.6	4.4	7.1	7.5	-40%	-21%	+6%
50-54	5.7	4.0	7.5	4.7	7.9	9.1	-30	-37	+15
55-59	6.4	8.8	7.9	7.7	10.1	11.9	+38	-3	+18
60-64	6.0	7.4	7.3	12.3	14.4	13.2	+23	+68	-8

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THE ECONOMIC STATUS OF THE YOUNG AND THE OLD

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The two major dependent groups in industrial countries are the children and the elderly. Their economic status, therefore, is of particular concern for public policy makers. In the United States, the economic status of young and old persons changed dramatically between 1970 and 1984 (Preston, 1984). One indication of this change was that poverty rates of the elderly plummeted as the rates for the children increased. While the first trend was applauded, the second has become a topic of increasing concern in the United States. In this paper, comparisons of the economic status of children and the aged in five other industrial countries reinforces the concerns about their relative economic status. U.S. children not only have higher poverty rates than the U.S. elderly, but they also have higher poverty rates by both relative and absolute measures than children in all the other countries examined.

International income comparisons have been limited by the lack of comparable data for pre- and posttax and transfer income and for the demographic unit. Comparable income and demographic data did not exist for most countries until the Luxembourg Income Study (LIS) reported its first results at a conference in summer 1985. LIS created comparable income data files for six countries plus the United States. As a consequence, LIS data offers us our first clear economic window through which to look at individuals in mature industrial societies and learn the lessons such comparisons can teach.

This paper briefly discusses the data used and then compares the adjustable disposable income of the young and the old relative to the national income average in each country. It compares the poverty rates of the young and the old, first on a relative basis and then on an absolute basis. It then explores those factors that contribute to the relative and absolute poverty rates. We conclude by raising some questions that need to be addressed in order to have a comprehensive understanding of the economic status of the young and the old in other countries.

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MAKING INCOMPARABLE DATA COMPARABLE

Between 1979 and 1981, seven countries conducted national household surveys which collected detailed income data. The data from these seven surveys were adjusted for definitional differences of both income and housing units. The adjusted data from these surveys have become the core of the LIS data set. The LIS data base includes seven countries, the six included in this paper--Canada, the Federal Republic of Germany, Norway, Sweden, the United Kingdom, and the United States--and Israel. Israel's economic situation is so anomalous compared with the other countries that it does not add sufficient insights to include in a paper limited to this topic.

Each survey covers at least 97 percent of the noninstitutionalized population. While some ethnic groups, such as Lapps in Norway or Aleuts in the United States, have sample sizes too small to be representative, the age cohorts, which are our major concern in this paper, are well represented.

The income concept defined as disposable income (posttax, post-transfer income) is the concept used throughout this paper. The LIS data set contains 35 income and tax variables and 30 demographic variables. It includes all forms of cash income (earnings, property income, all cash tranfers) net of direct taxes (that is, employer and employee taxes and income taxes).

The income variables were further adjusted for differences in family size and composition. The equivalence scale employed is between a per-capita income, which counts each person in a three-person family as .33 equivalent adults, and household income unadjusted for the number of people in the household. While the equivalence scale is simplistic in nature, it is virtually identical to that used by the Organisation for Economic Cooperation and Development (OECD, 1985) and by Hauser and Nouvertre (1980). For a more complete discussion of the development or application of this equivalence factor and its comparison to other household equivalence scales, see Smeeding, Schmaus, and Allegreza (1985). Additional information on the LIS data set is provided in a set of appendix tables.

THE INCOME OF THE YOUNG AND THE OLD COMPARED WITH THE NATIONAL MEANS

The young and the old are at either end of the life cycle. And the life-cycle theory suggests that the income of people at the cycles' beginning and end will be lower than the income of the people who are in the middle. This predictable pattern of income is, not surprisingly, reconfirmed in the six countries examined. There are, however, some curious variations that earlier LIS data sets uncovered (Hedstrom and Ringen, 1985; Achdut and Tamir, 1985).

Table 1 presents data on the ratio of adjusted disposable income to the national mean for six countries. In general, adjusted disposable income relative to the national mean is highest for households with heads ages 55 to 60. Only in West Germany and the United Kingdom

TABLE 1 Ratio of Adjusted Disposable Income to National Mean, for Selected Age Groups and Countries

Country	24 and younger	25-34	35-44	45-54	55-64	65-74	75 and older	Standard deviation
Canada	.87	.96	.96	1.11	1.15	.94	.81	.11
West Germany	.86	.88	.94	1.30	1.07	.85	.79	.17
Norway	.81	.96	.99	1.04	1.18	1.01	.79	.12
Sweden	.86	1.00	.98	1.12	1.17	.96	.78	.13
United Kingdom	.99	.97	.97	1.20	1.17	.76	.67	.18
United States	.77	.93	.95	1.13	1.21	.99	.84	.14
Mean	.88	.96	.96	1.13	1.17	.92	.78	--
Standard deviation	.08	.04	.02	.09	.05	.08	.08	--

Note: Disposable income is posttax and transfer income. The adjustment of disposable income for family size is done on equivalence scale. For a fuller discussion, see Smeeding, Schmauz, and Allegreza (1985). The national mean equals 1.00

is the income of the households ages 45-54 larger than that of the 55-60 households. As people reach retirement age, their earnings begin to drop significantly, reducing their adjusted disposable income (Achdut and Tamir, 1985). And the older the elderly are, the lower their adjusted disposable income is relative to the national mean in every country. The average elderly person ages 65-74 had income that was 92 percent of the national average. The average elderly income of people 75 and older, however, was only 78 percent of the national mean. Interestingly, the largest drop in income between 65-74 and the 75 and over households is in Sweden and Norway.

The disposable income of households with heads ages 65-74 is similar to the income of households most likely to have children, those with heads ages 25-44, in every country but the United Kingdom. The adjusted disposable income for households 75 years and over, however, is less than the income for the households most likely to have children in every country. But the size of the younger households generally is larger than the elderly households and, therefore, their per-capita income may be less even though their household income is equal to or more than the income of the elderly households.

The above comparisons of the income of various households to the national income mean are predictable. However, because these comparisons are based on the mean, they provide no information about the poverty among age groups. The pattern of individual poverty, as discussed below, shows a different picture than one taken through the filter of national means.

RELATIVE AND ABSOLUTE POVERTY AMONG THE YOUNG AND OLD

International poverty comparisons raise conceptual and methodological issues. Poverty can be defined in terms of absolute income. Persons are poor if their income falls beneath some designated level--usually derived from the cost of a minimal "necessary" bundle of goods. In this view, poverty entails physical deprivation, such as poor housing, inadequate heating, and poor nutrition.

But physical deprivation may also be socially defined and related to the median income (Kilpatrick, 1983; Easterlin, 1974; Rainwater, 1974; Chomitz, 1984). Thus, a person who is poor by contemporary U.S. norms enjoys a physical standard of living superior to that of a wealthy Bangladeshi. In this view, poverty is relative to the particular society.

Both viewpoints are valid and, therefore, this paper uses both relative and absolute measures of poverty. Relative poverty is defined as the percentage of people who have posttax and transfer income adjusted by the equivalence scale (adjusted disposable income) below one-half the national median income. Absolute poverty is defined as the percentage of people who have adjusted disposable income below two different measures:

- The U.S. poverty line converted into national currencies by using the purchasing power parities developed by the OECD (OECD, 1985);

• The U.K. poverty line defined as the supplement benefit schedule plus housing allowance for a three-person family (husband, wife, and one child age 11 to 13 years) living in rental housing. This poverty line also was adjusted by the OECD purchasing power parities.

Only the United States and the United Kingdom in the LIS data base offer a national standard for defining absolute poverty. Even the mature welfare state of Sweden continues to have means-tested welfare programs administered at the local level, which use different poverty lines.

As Table 2 makes clear, the British poverty standard is about 80 percent of the level of the American poverty line. The impact of using the British poverty standard instead of the U.S. standard is dramatic; in the United Kingdom, it reduces the poverty rate of the aged 89 percent. Poverty rates are, therefore, very sensitive to where the poverty line is located relative to the median income.

The United States uniformly has more child poverty than any other country under all three definitions of poverty. One in four children are pooor by the relative standard, one in six by the absolute U.S. poverty line, and one in nine by the U.K. poverty line (Table 2). When we consider the position of the aged using the absolute U.S. poverty line, the poverty of the American aged is lower than in the United Kingdom, but higher than the other countries. If we use the relative poverty line, the United States and the United Kingdom still have the highest relative poverty among the aged, followed by Canada and West Germany. Poverty among the aged in Sweden has been virtually eliminated due to the high minimum benefit levels in the social insurance system.

In no country are poverty rates of the aged and children the same under any definition of poverty. Table 2 shows that Norway, the United States, and Canada have more child poverty than aged poverty, using the absolute U.S. poverty line. In these countries, the poverty rate of children is 40 percent, 49 percent, and more than 200 percent higher than the poverty rates for the aged, respectively.

West Germany and the United Kingdom show the opposite pattern--more aged than child poverty. The pattern stays the same regardless of the definitions employed, except when the U.K. poverty line is employed in the United Kingdom and Norway; in Norway, the U.K. poverty line reverses the pattern and the poverty rate for the aged becomes more than for the young.

In general, the move from a relative to a U.K. absolute rate produces a steady decline in the value of the poverty line relative to median income. We also can see that as we move away from a relative to an absolute poverty line, aged poverty declines more rapidly than child poverty. Therefore, the more stringent a definition of poverty, the more visible is child poverty relative to the poverty of the aged.

The persistently high rates of poverty among U.S. children under all definitions of poverty used in this paper should be of concern. The U.S. child poverty rates using the U.K. poverty line is more than double that of Canada and the United Kingdom and triple the rate in every other country. Perhaps of most concern should be the comparison of U.S. and Canadian children. Although the children of both countries

TABLE 2 Relative and Absolute Poverty Among Children and the Aged, for Selected Countries

Country and poverty measure	Poverty line as percent of median income[a]	Children					Aged			Ratio of child to aged poverty rate
		Percent change[b]			Percent change[b]			Percent change[b]		
		From relative	From U.S.	Poverty rate	From relative	From U.S.	Poverty rate	From relative	From U.S.	
Canada										
Relative[c]	50.0			16.8			10.3			1.63
Absolute:										
U.S. Measure[d]	38.0	-24.0		9.5	-43.5		3.0	-70.9		3.17
U.K. Measure[e]	30.3	-39.4	-20.3	5.3	-68.5	-44.2	1.5	-85.4	-50.0	3.53
West Germany										
Relative[c]	50.0			6.3			9.3			.68
Absolute:										
U.S. Measure[d]	52.6	5.2		8.0	27.0		10.8	16.1		.74
U.K. Measure[e]	42.0	-16.0	-20.2	3.2	-49.2	-60.0	5.0	-46.2	-53.7	.64
Norway										
Relative[c]	50.0			5.6			4.6			1.22
Absolute:										
U.S. Measure[d]	53.6	7.2		7.7	37.5		5.5	19.6		1.40
U.K. Measure[e]	42.8	-14.4	-20.1	3.2	-41.0	-58.4	4.1	-10.9	-25.5	.78
Sweden										
Relative[c]	50.0			5.2			0.0			*
Absolute:										
U.S. Measure[d]	45.0	-10.0		4.9	-5.8		0.0	*		*
U.K. Measure[e]	35.9	-28.2	-20.2	2.4	-53.8	-51.0	0.0	*	*	*
United Kingdom										
Relative[c]	50.0			10.4			20.8			.50
Absolute:										
U.S. Measure[d]	51.4	2.8		11.0	5.8		23.5	13.0		.47
U.K. Measure[e]	41.0	-18.0	-20.2	4.7	-54.8	-57.3	2.6	-87.5	-88.9	1.81
United States										
Relative[c]	50.0			24.1			17.4			1.39
Absolute:										
U.S. Measure[d]	40.6	-18.8		17.4	-27.8		11.7	-32.8		1.49
U.K. Measure[e]	32.4	-35.2	-20.2	11.6	-51.9	-33.3	3.9	-77.6	-66.7	2.97

[a]Median income refers to median posttax and transfer (disposable) adjusted income, where the LIS equivalence scale (Appendix A) is used to adjust income for differences in family size: all equivalences are normalized to a three-person family.

[b]Percent change from x to v is calculated as $[(v-x)/(x)] \cdot 100$

[c]Relative poverty includes all persons with incomes below half the median income.

[d]Absolute: U.S. Measure includes all persons with incomes below the official U.S. government, three-person poverty line, converted to other currencies using OECD purchasing power parities.

[e]Absolute: U.K. Measure includes all persons with incomes below the supplemental benefit scales for a couple with a child age 11-12 years, plus rental allowance, converted to other currencies using OECD purchasing power parities.

* = Undefined.

are similar in many ways, their poverty rates are very different regardless of the definition of poverty. If the U.S. poverty line measure is used, the poverty rates of U.S. children is 83 percent higher than the Canadian rate. Why such differences exist need to be better understood.

POSSIBLE EXPLANATIONS FOR THE DIFFERENCES IN THE ECONOMIC STATUS OF THE YOUNG AND THE OLD

There are a number of possible explanations of the substantial differences in the economic status of the young and the old found in the six countries examined, several of which will be briefly discussed in this paper:

- relative size of the two age groups in the general population;
- differences in family structure, such as one- and two-parent families;
- income inequality within age cohorts; and
- differences in income support systems.

Relative Size of Age Groups

Countries with a large share of aged or children in their population may find it burdensome to allocate enough economic resources to these groups to maintain their relative economic well-being. Thus, poverty rates might be directly related to the relative number of young and old in the population. But the evidence is not strong for this hypothesis for either the young or the old.

West Germany and Sweden have the smallest proportion of children (23 percent) of the six countries studied; Norway the most children (37 percent), and the other countries fall in between (28 percent). But the child poverty rates (using the U.S. poverty line) for Sweden and West Germany are 5 to 8 percent, while in Norway the rate also is 8 percent. The three countries in between the extremes have the highest poverty rates. These three countries have essentially the same proportion of children in their population: the United States (28.9 percent), Canada (28.4 percent), and the United Kingdom (28.3 percent). Yet the relative poverty rate in the United States is more than double the rate in the United Kingdom, and the absolute poverty rate in the United States is 50 percent higher than in the United Kingdom. Therefore, the relative number of the children in the general population is not a strong predictor of their poverty rate.

The United States and Canada have the smallest proportion of aged persons in the population (9 to 11 percent), followed by the United Kingdom and Norway (12 to 13 percent), while West Germany and Sweden have 16 and 18 percent. If we try to relate each of these pairs to the poverty rate of the aged, no pattern emerges. The United States and

Canada, with similarly aged populations, have widely different poverty rates (using the U.S. poverty line)--12 percent in the United States versus 3 percent in Canada. A similar divergence is found for the United Kingdom and Norway--24 percent versus 4 percent, and between West Germany and Sweden--11 percent versus none. Therefore, there seems to be no correlation between the relative size of the aged and their poverty rate.

In some countries, the poverty rates (using the U.S. definition) for both the aged and children are relatively high: the United Kingdom and the United States are examples. Other countries do better for one or the other group. In Canada, for example, 3 percent of the aged and 10 percent of the children are in poverty. West Germany is the opposite with 11 percent of the aged and 8 percent of the children are poor. Finally, the Scandinavians do better for both groups--showing that it is possible to help both groups, even when there are many old, as in Sweden, or any children, as in Norway.

Family Structure

Poverty rates do vary by family structure. Table 3 shows that in all six countries the relative poverty rate of children is substantially higher in one-parent families than in two-parent families or other kinds of family structures. However, the United States and Canada have significantly higher rates of poverty in both one- and two-parent families than the other countries. It would be tempting to blame the U.S. poverty rate for children on the fact that we have so many one-parent families. But recent research suggests that increases in one-parent families since 1959 has reshuffled poverty among poor households rather than created new poverty (Bane and Ellwood, 1986). Moreover, both Norway and Sweden have a higher proportion of families with only one parent (18.0 percent and 17.1 percent, respectively) than does the United States (15.4 percent). Yet the poverty rates of children in the one-parent families of Norway and Sweden are the lowest in the six countries studied.

Income Inequality Within Cohorts

In part, the explanation of the high poverty rates among U.S. children may be a function of the income distribution within the United States, which today favors older families without dependent children over younger families with dependent children. Table 4 presents data on income inequality in each country studied. Families headed by people age 24 or younger had lower disposable income relative to the national mean than any other age group in the United States, as well as any other age group in the other five countries (except for the very old in the United Kingdom). This age group in the United States not only has less income relative to the national mean, but it also had more income inequality within the group than any other young cohort in the other five countries. Moreover, the heads of households likely to have the most

TABLE 3 Relative Poverty Rates of the Young by Family Type for Selected Countries (percentage)

Country	Family type			
	One-parent families[a]	Two-parent families[b]	Other families[c]	All types of families
Canada	51.2	13.2	13.0	16.8
West Germany	30.5	3.3	10.2	6.3
Norway	13.7	3.7	10.7	5.6
Sweden	9.8	5.5	2.5	5.2
United Kingdom	36.4	9.2	6.2	10.4
United States	60.0	16.6	20.6	24.1

Note: Relative poverty is defined as children living in a given type of family with adjusted net after-tax income less than half of the median for all families, as a percentage of all children of each type. Children are persons 17 years or under.

[a]Children in one-parent families are living with only one natural parent and no other adults in the family.

[b]Children in two-parent families live in units with two parents only and no other adults.

[c]Children in other families may live with adults other than one parent alone or two parents alone, for example, living with grandparents, in extended family situations, foster homes, and so on.

TABLE 4 Ratio of Adjusted Disposable Income to National Mean, for Selected Age Groups and Countries

Country	24 and younger	25-34	35-44	45-54	55-64	65-74	75 and older	Total	Standard deviation
Canada	.332	.295	.285	.286	.296	.309	.291	.299	.016
West Germany	.304	.267	.317	.452	.342	.258	.282	.340	.050
Norway	.296	.249	.214	.229	.229	.250	.299	.243	.025
Sweden	.236	.209	.192	.216	.195	.143	.126	.205	.037
United Kingdom	.279	.264	.253	.246	.253	.266	.240	.273	.012
United States	.345	.313	.304	.303	.331	.342	.355	.326	.019
Mean	.300	.268	.271	.297	.284	.281	.287	.291	--
Standard deviation	.033	.031	.049	.076	.055	.067	.092	.050	--

Note: The higher the gini coefficient, the more income inequality exists.

Source: Peter Hedstrom and Stein Ringen, "Age and Income in Contemporary Society," LIS-CEPS Working Paper No. 4, Luxembourg, July 1985.

children are those ages 25-45. The income inequality among these age groups is higher for the United States than for the other countries except West Germany. But until we can disaggregate the households by those with children and those without children, the contribution of income inequality within age groups to the U.S. poverty of children cannot be explicitly determined.

Income Support Programs

Ultimately, an important determinant of the poverty of the young and the old in each country is likely to be the income support system in each country. There are considerable differences among the systems in the six countries. Some countries have a flat nonmeans-tested benefit for all aged; others have employment-related benefits supplemented by means-tested benefits. How effective these various income support systems are in reducing poverty will be the major focus of future research.

QUESTIONS VERSUS ANSWERS

This preliminary investigation of the economic status of the young and the old raises more questions than it answers. These questions go beyond this initial description of the data and will begin to explore the real potential of the LIS data set. For example:

- What is the poverty gap in these countries measured by both relative and absolute measures of poverty?
- How much do specific income support programs, such as children's benefits, private pensions, and social security, close the gap?
- What role do the wages of the second earner play in closing the poverty gaps in these countries?
- What is the "other family structure" that is so important in several countries?
- How important are the prime age limits in the total poverty population of these countries?

Children have higher poverty rates than the old in the United States today; they also have higher poverty rates than the children in the five other countries studied. Their poverty cannot be casually explained by either the relative number of children in the United States in general or the number of single-parent families in particular. Therefore, much more research needs to be done to explain why U.S. children are at such a disadvantage, not only in our own country, but also relative to the children of other countries.

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TABLE A-1 An Overview of LIS Databases

Country	Dataset Name, Income Year (and Size[a])	LIS Country Coordinators	Population Coverage[c]	Basis of Household Sampling Frame[h]
Canada	Survey of Consumer Finances 1981 (37,900)	Gail Oja Roger Love	97.5[d]	Decennial census
West Germany	Transfer Survey 1981[b] (2,800)	Richard Hauser Irena Stolz Gunther Schmaus	91.5[g]	Electoral register on census
Israel	Family Expenditure Survey 1979 (2,300)	Lea Achdut Yossi Tamir	89.0[e]	Electoral register
Norway	Norwegian Tax Files 1979 (10,400)	Stein Ringen Leif Korbol	98.5[d]	Tax records
Sweden	Swedish Income Distribution Survey 1981 (9,600)	Peter Hedstrom Robert Erikson	98.0[d]	Population register
U.K.	Family Expenditure Survey[b] 1979 (6,800)	Michael O'Higgins Geoffrey Stephenson	96.5[f]	Electoral register
U.S.A.	Current Population Survey 1979 (65,000)	Tim Smeeding Lee Rainwater Martin Rein	97.5[d]	Decennial census

[a]Number of actual household units surveyed.

[b]The U.K. and West German surveys collect subannual income data which is normalized to annual income levels (see text for explanation).

[c]As a percent of total national population.

[d]Excludes institutionalized and homeless populations. Also some for northern rural residents (Eskimos, Lapps, etc.) may be under sampled.

[e]Excludes rural population (those living in places of 2,000 or less), institutionalized, homeless, people in kibbutzum, and guest workers.

[f]Excludes those not on the electoral register, the homeless, and the institutionalized.

[g]Excludes foreign-born heads of households, the institutionalized, and the homeless.

[h]Sampling Frame indicates the overall base from which the relevant household population sample was drawn. Actual sample may be drawn on a stratified probability basis, e.g., by area, age, or other bases.

TABLE A-2 Measures of Relative and Absolute Poverty, Currency-based, and as Percentage of Median Income, for Selected Countries

Country	Relative poverty at or below half the median income[a]	Absolute poverty at or below: U.S. poverty line (converted using 3-year average exchange rate)		U.S. poverty line (converted using OECD puchasing power parities		United Kingdom poverty line	
		Currency-based	Percent of median income	Currency-based	Percent of median income	Currency-based	Percent of median income
Canada ($C)	10,400	8,694	41.7	7,903	38.0	6,310	30.3
West Germany[b] (DM)	1,333	1,339	50.2	1,401	52.6	1,119	42.0
Norway (Nkr)	35,182	28,615	40.7	37,748	53.6	30,139	42.8
Sweden (Skr)	43,333	37,622	43.4	39,004	45.0	31,140	35.9
U.K. (£)	2,603	2,715	52.2	2,674	51.4	2,135	41.0
U.S.A. ($)	7,104	5,763	40.6	5,763	40.6	4,601	32.4

[a]One half median disposable (posttax and transfer) income, adjusted for equivalence as follows:

Number of family members	1	2	3	4	5
Equivalence factor	.50	.75	1.00	1.25	1.50

[b]Monthly income (all others annual income).

TABLE A-3 Percentage of Distribution of Poor Children by Family Type for Selected Countries

Country	Family type			
	One-parent families	Two-parent families	Other families	All types of families
Canada	34.8	51.9	13.3	100.0
West Germany	24.2	42.5	33.3	100.0
Norway	12.2	73.2	14.6	100.0
Sweden	15.5	78.3	6.2	100.0
United Kingdom	26.6	67.6	5.7	100.0
United States	41.7	34.6	23.7	100.0

TABLE A-4 Percentage Distribution of Elderly Families and of Families with Children Across the Distribution of Adjusted Gross Income

Country/ Contents of Panel	Bottom Quintile		(Middle Three Quintiles)		Top Quintile	
	Elderly[a]	Children[b]	(Elderly)	(Children)	Elderly	Children
A. Percent of families of each type in each quintile:						
Canada	39.8	20.7	(43.9)	(66.7)	11.3	12.6
West Germany	37.4	16.3	(53.9)	(69.2)	8.7	14.5
Israel	39.9	15.1	(48.8)	(64.4)	11.3	20.5
Norway	49.2	15.3	(40.1)	(66.9)	10.7	17.8
Sweden	42.8	17.0	(47.9)	(70.7)	9.3	12.3
United Kingdom	62.3	14.9	(32.1)	(73.1)	5.6	12.0
United States	32.9	20.2	(55.9)	(66.9)	11.2	12.9
Average:	43.4	17.1	(46.8)	(68.3)	9.7	14.7
B. Percent of persons in families of each type in each quintile:						
Canada	33.9	21.1	(53.6)	(67.2)	12.5	11.7
West Germany	36.2	17.4	(54.2)	(69.7)	9.6	12.9
Israel	40.0	20.0	(49.2)	(63.3)	10.8	16.7
Norway	48.1	16.1	(38.3)	(68.7)	13.6	15.2
Sweden	38.2	18.0	(51.2)	(70.4)	10.6	11.6
United Kingdom	54.5	15.7	(38.1)	(72.9)	7.4	11.4
United States	29.0	22.2	(58.3)	(65.8)	12.7	12.0
Average	40.0	18.6	(49.0)	(68.3)	11.0	13.1

Note: Adjusted gross income = all forms of cash income gross of direct taxes, adjusted for family size using the LIS equivalence scale (see Table 4), arranged so that 20 percent of persons are in each quintile.

[a]Elderly families = one or more related persons headed by a family age 65 or over.

[b]Families with children = one or more children age 17 or under living with at least one parent.

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